AN OPEN CLINICAL TRIAL OF SIDDHA DRUGS *"PARANGIPATTAI CHOORANAM"* (INTERNAL) AND *"SANGAMVER THYLAM"* (EXTERNAL) IN THE TREATMENT OF *"KAALANJAGAPADAI"* (PSORIASIS)

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DECLARATION BY THE CANDIDATE

I hereby declare that this dissertation entitled "An open clinical trial of siddha drugs ***Parangipattai chooranam*** **(**Internal) And ***Sangam*****ver thylam** (External). In The Treatment of ***Kaalanjagapadai*** (PSORIASIS)" is a bonafide and genuine research work carried out by me under the guidance of **Dr.V.Mahalakshmi, M.D(S),** Lecturer**,** Department of **Sirappu Maruthuvam**, National Institute of Siddha, Chennai -47, and the dissertation has not formed the basis for the award of any Degree, Diploma, Fellowship or other similar title.

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BONAFIDE CERTIFICATE

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INTRODUCTION

மண்ணினில் ஒன்று மலர் நீரு மங்காகும்
பொன்னினில் அங்கி புகழ் வளி யாகாயம்
மன்னு மனோபுத்தி யாங்காரம் ஓரொன்றாய்
உன்னின் முடிந்த தொரு பூத சயமே.

-திருமந்திரம்

Siddha system of medicine is one of the ancient system of medicine originates from the southern part of India by siddhars. The creation, protection, and destruction are the major part of this system, to appears the universe and the human. The energy for these actions is considered to be derived from basis of three humors of the body namely *Vaatham*, *Pitham* and *Iyam*. This three are the fundamental principles in the composition of human body. Hence the derangement of *Vaatham, Pitham* and *Iyam* causes diseases and the diseases can be observed through the *Naadi*. Siddha system of medicine is not only heals physical ailments but also heals mental and spiritual components of human beings.

மிகினுங் குறையினும் நோய் செய்யும் நூலோர்
வளிமுதலா வெண்ணிய மூன்று.

- திருவள்ளுவர்

In the siddha system of medicine, the whole universe in turn is believed to be constituted of five primordial elements or *Panchabootham* (Earth, water, Fire, Air, and Space). The origin and formation of these basic elements, as well as role of these elements in the formation of every substance both in the universe and in humans. The nature of this combination to form the basis of three humors of the body.

உருபொருள் தாங்கு முடலு முயிரும்
உடற்கா தாரமொன் பஞ்ச பூதப்
பஞ்சீகரணப் பான்மையா மெனவும்
உயிர்க் காதார முயிர்த்தா தெனவும்
முப்பிரிவாகி முக்குண மணுகி
உடலையு முயிரையு மோம்பிக் காத்து
வருமென முதுமறை வகுக்குந் துணிபே.

-திருமந்திரம்.

In siddha system of medicine the diseases are classified as 4448. Among them the skin dermatological disorders are classified into 18 types of *kuttam* by siddhar *yugi munivar* . He mentioned about *kaalanjaga vaatham* in the classification of *vaatha* diseases. The *kuttam* is a common term usually referring to the complex skin disorders. In *Yugi chinthamani* , an authentic siddha text , also described eighteen types of skin disorders (*kuta noygal*). The classical description of, *Virpodaga kuttam, and Satharu kuttam* may be correlated with *kaalanjagapadai* (psoriasis).

In the text, Siddha maruthuvam sirappu, *Kaalanjagapadai* is a chronic non-infectious, recurrent, inflammatory disorder of the skin characterised by reddish, slightly elevated patches covered with the silvery white scales. The clinical features of *kaalanjagapadai* may be correlated to Psoriasis described in Modern dermatology. Psoriasis is a chronic inflammatory dermatosis that affects about 2 to 3% of the population. The lesions are characterised by brownish - red papules and plaques which are sharply demarcated and are covered with fine, silvery white scales.

மனநலம் மன்னுயிர்க் காக்கம் இனநலம்
எல்லாப் புகழும் தரும்

-திருவள்ளுவர்

The mind is the most potent tool to attain the health of the body because it allows us to determine how to manage our health. In this modern world human mind encounter's many kinds of stress. This is affirmed by the Siddhar's in their literature as root cause of most of the diseases especially psychosomatic problems. Prevalence studies from India are mostly hospital-based. The prevalence of psoriasis to be 0.44% to 2.8% among the skin patients in India. Highest incidence was noted in the age group of 20-39 years and the mean age of onset in males and females were comparable.

The exact cause of psoriasis remains unknown. There may be a combination of elements, including genetic predisposition, environmental factors, stress also a trigger for a psoriasis flare. Psoriasis independently associated with stress related disorders. The siddha system approaches diseases by holistic way to prevent and treat the condition. Hence the proper assessment of disease through various diagnostic tools mentioned in siddha literatures and with modern scientific methods.

Every day more number of cases reporting OPD of Ayothidoss pandithar Hospital, National institute of siddha. Even though, *Kaalanjaga padai* is non-contagious dermatological problems, It causes more stress to the mind of concerned persons. Some times this may leads to several mental depressions. Remissions and relapse of this disease is quite common and there is no specific treatment available in other systems of medicine.

However encouraging results are obtained in our Siddha system. With this back ground the disease *Kaalanjaga padai* was chosen for the dissertation work.

Many herbal & herbo-mineral formulations practiced in siddha system of medicine to treat Psoriasis and it gives immense results too. The investigator has selected the following drugs as trial drugs for *kaalanjagapadai,*

Internal drug *: PARANGIPATTAI CHOORANAM*
External drug: *SANGAM VER THYLAM*

AIM & OBJECTIVES

AIM

The purpose of this trial is to evaluate the efficacy of the Siddha herbal formulation "*Parangipattai Chooranam* (Internal) and *Sangamver Thylam* (External) in the treatment of *Kaalanjagapadai*" (Psoriasis).

PRIMARY OBJECTIVE

An open clinical trial of siddha drugs "*Parangipattai Chooranam* (Internal) and *Sangam ver Thylam* (External) in the treatment of *Kaalanjagapadai*" (Psoriasis).

SECONDARY OBJECTIVE

To examine the Kaalanjagapadai Siddha diagnostic methods such as *Envagai Thervu, Neerkkuri* in patients.

REVIEW OF LITERATURE

SIDDHA ASPECTS OF *KAALANJAGAPADAI*

In Siddha System of medicine, Skin diseases are commonly termed as Kuttam, Thorpini and as Sarma noi. *Kaalanjagapadai (*Psoriasis) is under this classification.

Aetiology of Kuttam

- **In the text of *Thirumoolar Vaithiyam* :**

"வியாதியுள் மூவாறுவிளங்கிய குட்டங்கேள்
சுயாதிக் கிரந்தி சுழல் மேகத்தா லாறும்
பயாதி மண்ணுளப் பல வண்டினா லெட்டும்
நியாதி புழுநாலாய்நின்றதிக் குட்டமே".

- Six types of skin diseases are caused by venereal disease.
- Eight types of skin diseases are caused by insect bites.
- Four types are caused by worm infestations

- **Guru Naadi Nool describes Aetiology as follows:**

"கிருமியால் வந்த தோடம் பெருகவுண்டு
கேட்கி லதன் பிரிவுதனை கிரமமாகப்
புழுக்கடி போல் காணுமது கிருமியாலே
செருமி வரும் பவுத்திரங்கள் கிருமியாலே
தேகமதில் சொறிக்குட்டம் கிருமியாலே
துருமி வருஞ் சுரோணிதங் கிருமியாலே
சூட்சமுடன் கிரிசைப்பால் தொழில் செய்வீரே".

- **In the text *Yugi Vaidhya Chinthamani*,**

"விளம்பவே மிகுந்தஉஷ் ணந்தன் னாலும்
மிகுந்த சீதளத்தாலு மழற்சி யாலும்
வளம்பவே மந்தத்தால் வாந்தி யாலும்
மகத்தான பெண்ணோடு மருவ மாலும்

கிளம்பவே கிலேங்சகள் மிகுத லாலும்
கெடியான வுரக்கங்கள டைத லாலும்
தளம்பவே மயிருகற்கள் தவிடு மண்கள்
சாதத்திற் பருகலால்மிக்குங் குஷ்டம்".

Excessive heat and cold, laziness, excessive sexual indulgence, robbery etc. These habits are prominent among the factors which lower the immune mechanism of the body (Udal vanmai) and make the body liable to disease. Added to excessive intake of food items which are hard to digest, imbalanced food, and Vomiting due to Indigestion, food mixed with stone and hair.

- **The text *Agasthiyar paripooranam -400* describes the Psycho –social causes (Kanma varalaru)**

"பழவினையால் விஷப்பூச்சி கடித்த தோஷம்
பாதகர்க்கு ஒரு நாளும் தீர்வதில்லை
உளவினையால் லூடாபிக் கொள்ள வந்த
உண்மையது அறியாமல்மூர்க்கஞ் செய்வார்
களவினையுந் தீர்வதில்லை கடினமெத்த
கருணையுள்ள பூரணத்தில் கண்காட்சி
அடவினை நீகாணுமுன்னெ அகலச் சொல்லி
அடையாளம் விரல் குறுகு மின்னங்ககேளே".
"விரல்குறுகுங்கால திமிரும் விஷம் போலேறும்
மெய்யமுந்துந் தலை சுழலும் வெளுக்கும் மேனி
பரமான தேகமெல்லாந் தடித்து வீங்கும்
பாதமெல்லாம் வெடித்துமிக்குபுண்ணு காணும்
சரசமுடன் சொறி கரப்பான் பணம் போல் தோணும்
சந்தையாமே விந்தைகெடுத் தடித்து வீங்கும்
பாருலகி லிந்நோய்க்கு மருதீயாதே
நல்லோரைப் பழித்த குட்டங்கன்னமாமே".

In this text it has been mentioned that diseases which are caused due to sins committed in the previous birth will be cured only if Kanmam is expiated. Siddhar

Agasthiyar mentioned that *kanmam* (Genetic predisposition) is the main cause for *kuttam* in the text *Kanmam kandam* as follows:

"சேர்ந்த குட்டமொடு குறைநோய்கள்
சேதிகேள் மலராத வரும்ப கொய்தல்
தாரிந்த சீர் செந்து வதைகள் செய்தல்
தாய் தந்தை மனது நொந்து ரோகந்தானே.
தானென்ற தெய்வவுருத் தனையழித்தல்
சார்வான பெரியோர்கள் தமைப் பழித்தல்
கானென்ற நந்தவனம் பூஞ்செடிகள் வெட்டல்
கருமமடா சரீரத்திற் காசு போலே
யூனென்ற வுடம்பெல்லாம் மொட்டு மொட்டா
யுடன் வெளுத்து குறையோயுதிரஞ் சிந்தும்
வானென்ற கருமங்கள் தீர்ப்பதற்கு
வரையொன்று சொல்வேன் கேள் நந்தவன்மையே".

- Plucking the flower buds
- Cruetly to animals
- Destroying statues of god
- Abuse elderly people
- Destroying forests and gardens

Triggering Factors of Kaalanjagapadai

- Tonsillitis (*Lasunathabitham*)
- Respiratory disorders
- Allergic disorders
- Stress and strain
- Anxiety,Depression
- Seasonal variations
- Certain drugs (eg : *Thamirachendhuram*)

CLASSIFICATIONS:

According to Thiru T.V.Sambasivam Pillai there are 18 types of *kuttam:*

1.*Neerkuttam*- Leprosy with serous exudation	10. *Viral kuraikuttam*-Lepramutilans
2.*Venkuttam* - White Leprosy	11. *Sadaikuttam*-Leprosy with confluent ulcers
3.*Sorikuttam* - Psoriasis	12. *Yaanaikuttam* -Thick skinned Leprosy
4.*Karunkuttam* - Black Leprosy	13. *Thimirkuttam* -Anaesthetic Leprosy
5.*Perumkuttam* - True Leprosy	14. *Viranakuttam* -Ulcerated Leprosy
6. *Senkuttam* -Macular Leprosy	15. *Kaaikuttam*- Nodular Leprosy
7. *Porikuttam*- Leprosy with Granules	16. *Azhikuttam*- A form with sloughing ulcers
8.*Viri kuttam* -Leprosy with Fissures	17. *Kirumikuttam* -Leprosy with microbes
9.*Yeri kuttam*- Leprosy with burning sensation	18. *Aarakuttam*-Incurable Leprosy

Classification by *Dhanvanthri*

1.Kabala kuttam	*10. Bamakuttam*
2. Sarmeegakuttam	*11.Kagananthi kuttam*
3. Kideepakuttam	*12.Sithuma kuttam*
4. Mutdhumbakuttam	*13.Vibhathega kuttam*
5. Visharchigakuttam	*14.Sadhariga kuttam*
6. Mandalakirakuttam	*15.Vispodaga kuttam*
7. Agauvaikuttam	*16.Sarmathala kuttam*
8. Thathrukuttam	*17.Ven kuttam*
9. Pundareegakuttam	*18.Alasa kuttam*

"வாதபித்தச் சிலேற்பனத்தின் வாதரோகந் தானெனினும்
தீது குட்டமேழுந் தீரும் குட்டம் பதினொன்று
மோதுங் குட்டம் பதினெட்டுடன்றோய வையினுற்பவமும்
பேதக்குணமுவியாதியின்முன்பிறக்கும்குணமு முரைப்பேனே".

- **Classification of *yugivaithyachinthamani***

"முத்தாகுங் குட்டந்தான் பதினெட்டுக்கும்
முனியான யூகிநான் சொல்லக் கேளாய்
புத்தாகும் புண்டரீக குட்டத் தோடு
பெருகின்ற விற்போடக குஷ்ட மாகும்
பத்தாகும் பரமகுஷ்டம் கேசர குஷ்டம்
பரிவான கர்ணகுட்டம் சிகும குட்டம்
கித்தாகுங் கிருஷ்ணகுட்ட அவுதும்பர குட்டம்
கெடியான மண்டலகுட் டமுமா மென்னே
குட்டமாம் பரப்பரிச குட்ட மொடு
குடிலமாம் விசர்ச்சீக குட்ட மாகும்
வட்டமாம் வையாதி குட்ட மோடு
மருவலாங் கிடீபகுட்டஞ் சர்ம தேவம்
திட்டமா தேத்திருக் குட்ட மோடு
சித்துமா குட்டஞ்சா காறுகுட்டம்
துட்டமாஞ் சுவேதகுட்டந் தன்னோ டொக்கச்
சுயம்பான பதினெட்டு குட்ட மாச்சே".

1. Pundareegam-Padarthamarai	*10. Mandalam -Valayaperunoi*
2. Virpodagam –Koppulaperunoi	*11. Abarisam -Valiperunoi*
3. Bamam- Siranguperunoi	*12. Visharchigam -Soriperunoi*
4. Gajasarmam- Yaanaitholperunoi	*13. Vibhadhigam-Senkuttam*
5. Karnam- Kaadhuperunoi	*14. Sarmathalam -Tholvedippuperunoi*
6. Sikuram-Tholperunoi	*15. Kidepam - Pandritholperunoi*
7. Krishnam - Karuperunoi	*16. Thethuru -Thadippuperunoi*
8. Avudhumbaram – Athikkaiperunoi	*17. Sithuma -Naaperunoi*
9. Sadharu – Puraiperunoi	*18. Suvedham -Venkuttam*

The clinical features of *Virpodagakuttam and Sadharukuttam* resembles *Kaalanjagapadai*.

விற்போடக குட்டம்

புதுமையாய்ச் சரீரமெங்குந் தினவுண் டாகும்
பொருவெடியாய்த் திக் கெனத்தீக் கொழுந்து போல
மெதுமையாய் விட்டெரியும் நல்லபாம்பின்
விஷப் படம் போல தடித்து வெளுப்பு மாகும்
சுதுமையாய்மிகச் சொரியுஞ்சிவப்புமாகும்
தூக்கமொடு சஞ்சலமும் மிக வுண் டாகும்
கதுமையாய் தோலெல்லாந் தடிப்புண்டாகும்
கனத்தவிற்போடகமான குட்டந்தானே.

யூகி முனி வைத்திய சிந்தாமணி-800

Characterized by elevated skin lesions with erythema and itching, Burning sensation will be present on and off. Usually these entities are associated with anxiety and despair.

சதாரு குட்டம்

சித்தானதண்டிப்பாய் ரத்தவர்ணம்
செழும்பச்சை வெள்ளையாய்ச் சிவப்புமாகும்
எத்தான வெரிப்போடு தினவுமாகும்
எளிதான சேட்டுமவாதத் துற்பத்தி
பத்தான கரடுகட்டிப் புண்ணுமாகும்
பாம்பு தோல் போற்றிரைந்து பருத்துக்காணும்
வித்தான மூக்கோடு காது கன்னம்
மிகத்துடிப்பாஞ் சதாரு குஷ்டந் தானே.

யூகி முனி வைத்திய சிந்தாமணி-800

Characterized by skin lesions covered with silvery White scales, erythema, itching, burning sensation and thickness of ears, cheeks and nose.

Kaalanjagapadai

Synonyms

Venparusedhil, Sedhiluthirnoi

According to the text Maruthuvam Sirappu, Kaalanjagapadai is defined as, a chronic non-infectious, recurrent, inflammatory disorder of the skin characterised by round circumscribed, erythematous, slightly elevated patches covered with silvery white scales.

CLINICAL FEATURES:

In the text, Siddha Maruthuvam Sirappu, the clinical features of "*Kaalanjagapadai"* have been described as follows:

The lesions are patches and macules which are red in colour with raised margin and the lesions are covered by silvery, White and rough thick scales.

The patches are coin shaped over them.In some,the shape may be either round or oval.

There are variations in the size and shape of patches according to the site.

The skin lesions occur over the front and back of the elbows

Sometimes as per the severity, it is seen all over the body. Excessive scaling and generalized erythema develops all over the body.

In children this lesion may be like water drops and these may occur in scalp and face.

Mild oozing will be present if flexure region (axilla,groin&infra mammary regions) are the involved in females.

One fourth of patients have nail involvement like pitting and dimpling in nature 30% of patients develop affection of joints as psoriatic arthropathy.

(*https//en.m.wikipedia.org)*

Psoriatic arthropathy

Kalanjapadai is often associated with painful joints known as *Kalanjagavatham*. It may affect any joint .The most often affected joints are terminal interphalangeal joints.In these cases, the affected fingers show nail changes.This combination is termed Psoriatic arthropathica.

Yugi muni describes the clinical features of *Kaalanjagasanthuvathasoolai*as follows:

Prevalence of *Kaalanjagapadai*

- 2 - 3% of population affected by psoriasis
- 5-25 years is the commonest age group
- Remission and relapses occur
- Females are commonly affected than male

Seasonal variations of *Kaalanjagapadai*

Vaatham

The *vaatham* activities increased during the period of Muthuvenilkaalam*Aani* (june-july), *Aadi* (july-august)

Iyyam

The *iyyam*activities increased during the period of PinpanikaalamMaasi, (february-march) Panguni (march-april)

The signs and symptoms of *Kaalanjagapadai* will aggravated in above mentioned months.

Psoriatic Arthropathy:

Kaalanjagapadai is often associated with painful joints known as "*Kaalanjagavaatham*". It may affect any joint. The most often affected joints are terminal inter-phalangeal joints. In these cases, the affected fingers show nail changes. This combination is termed" Psoriatic arthropathica".

Yugi muni describes the clinical features of *Kaalanjagavatham* as follows:

"வாத மாங் கால்கையில்குரங்கி ரண்டும்
வருத்து சந்துமுறுக்கியே குடைந்து நொந்து
நாதமா நடைதானுந் தான்கொடாமல்
நலிந்துமே முடமாகிக் கரடு கட்டிச்
சேதமாஞ் சடந்தானு மிகவெ ளுத்துந்
தின வோடு சிரங்குமாய்ச் சேட்ப மாகிக்
காதமாய ருசியொடு மயக்க மாகும்
கருதிய காளாஞ் சகமாம் வாதமாமே". ***- (செய்யுள்- 259)***

The joints of fingers, feet, ankles, knees and sacroiliac are selectively affected and these joints are painful. The deforming erosive arthritis targets fingers and toes. Marked cartilage destruction and bony articulation results in loss of joint space and marked instability. The whole body becomes pale (anaemic). Lesions of well-defined erythematous papules which are sharply demarcated appear on the skin. There is also loss of taste and giddiness.

MUKKUTTRA VERUPADUGAL:

Human body is influenced by three Thathus such as *Vaatham, Pitham* and *Kabam*. They are responsible for normal physiological conditions of the body. In *Kaalanjagapadai,* the following *Mukkutram* are commonly affected,

Vatham

1. *Abanan* - Habitual Constipation
2. *Viyanan* - Erythematous changes in the affected areas of skin
3. *Samanan* - Due to other vaayus, it is affected
4. *Kirukaran* - Loss of appetite
5. *Devathathan* - Insomnia like condition

Pitham

1. *Aakkanal* - Indigestion of food
2. *Vannaeri* - Paleness of the conjunctiva and tongue
3. *Aatralangi* - Difficulty to do the routine works and sluggishness
4. *Olloli thee* - Dryness and roughness of skin

Kabam

In case of *kaalanjakapadai kabam* were not affected

Udalthathukkal

Our body consists of seven *Udaltha thukkal.* It gives strength and structure to our body.

In *Kaalanjagapadai* patients, *Saaram, Senneer and Oon* are commonly affected.

Saaram	:	Dryness, roughness, tiredness
Senneer	:	Erythematous patches present
Oon	:	Fissured lesion present in few cases.

Udalvanmai

It is classified into 3 types, they are

Iyarkai Vanmai

Natural immunity of the body by birth

Seyarkai Vanmai

Improving the health by intake of nutritious food materials and medicines.

Kaala Vanmai

Development of immunity according to age and the environment. When the *Udal vanmai* is affected there may be possibilities of occurrence of *Kaalanjagapadai*.

Iymporigal

In *Kaalanjagapadai*, Mei is affected. Roughness of the skin, white silvery scales is seen.

Kanmenthriyam

In case of *Kaalanjagapadai* no abnormalities were seen in *Kanmenthriyam.*

***Piniyariyummuraimai* (Diagnostic Methods)**

Piniyariyummuraimai is the method of diagnosing disease. It is based on the following principles:

- *Poriyalaridhal*
- *Pulanalaridhal*
- *Vinaathal*

Poriyalaridhal and *Pulanalaridhal* means examining the patient's *'Pori'* and *'Pulan'* with that of physician's *'Pori'* and *'Pulan'*. *'Vinaathal'* is a method of enquiring about the details of the patient's problem from his own words or from his parents or attenders who are taking care of the patient, when the patient is not able to speak (or) if the patient is a child.

***ENVAGAI THERVUGAL* (Eight tools of examination) :**

"நாடிப்பரிசம் நாநிறம் மொழிவிழி
மலம்மூத்திரமிவை மருத்துவராயுதம்".

***Naadi* (Pulse):** In *Kalanjagapadai*, the following types of *Naadi* could be felt. They were,

a) *Vaathapitham*

b) *Vaathakabam*

c) *Pithakabam*

***Sparism*:** In case of *Kaalanjagapadai,* slightly raised well defined dry erythematous macules or plaques, covered with white silvery scales can be noticed in affected areas.

***Naa* (tongue):** In case of *Kaalanjagapadai* abnormality of tongue like geographical tongue may be noted.

***Niram*(complexion):** In case of *Kaalanjagapadai*, white patches with silvery scales could be noticed at affected areas.

***Mozhi* (voice):** In case of *Kaalanjagapadai* no abnormalities were observed.

***Vizhi (*eye):** In case of *Kalanjagapadai*, no abnormality was seen in *Vizhi.*

***Malam* (stool)**: In case of *Kalanjagapadai*, constipation was reported in some cases.

***Moothiram* (urine):** Collection of urine for the determination of *Neerkkuri* and *Neikkuri*, is an important diagnostic method

- ***Neerkkuri***

Prior to the day of urine examination the patient is instructed to take a balanced diet. The patient should have good sleep. After waking up in the morning, the first urine voided is collected in a clear wide mouthed glass container and is subjected to analysis of "*Neerkkuri*" within one and a half an hour. In a*Kalanjagapadai* patients, pale, yellow, colourless, pale yellow, straw colored, urine was noticed.

- ***Neikkuri***

The collected specimen (Urine) is kept open in a glass dish or china clay container. It is to be examined under direct sunlight, without any shaking of the vessel.

Then add one drop of gingelly oil without disturbing the urinary specimen and the *neikkuri* was noted in direct sunlight and conclude the diagnosis as follows,

Character of *Vaathaneer*

"அரவென நீண்டினஃதே வாதம்"

When the oil drop spreads like a snake, it is called "*Vaathaneer*"

Character of *Pithaneer*

"ஆழி போற்பரவின் அஃதே பித்தம்"

When the oil drop spreads like a ring, it is called "*Pithaneer"*

Character of *Kabaneer*

"முத்தொத்து நிற்கின் மொழிவதென் கபமே"

When the oil drop appears like a pearl, it is called "*Kabaneer*"

Character of *Thonthaneer*

Snake in the ring, ring in the snake, snake in the pearl and ring in the pearl are the characters of *Thonthaneer (mixed type)*. In *Kaalanjagapadai,* the *Neikkuri w*as *Vaathaneer, Pithaneer and Kabaneer.*

LINE OF TREATMENT

"நோய்நாடி நோய்முத னாடி யதுதணிக்கும்
வாய்நாடி வாய்ப்பச் செயல்".

-திருவள்ளுவர்

Thiruvalluvar says in **"Thirukkural"** about physician's duty to study the disease, study the cause, seek subsiding ways and do what is proper and effective.

"உற்றவன் தீர்ப்பான்மருந்துழைச் செல்வானென்
றப்பனாற்கூற்றே மருந்து".

-திருவள்ளுவர்

In Siddha system of medicine, the main aim of the treatment is to cure *Udalpini* and *Manapini.* Treatment is not only for perfect healing but also for prevention and rejuvenation.

Line of treatment is as follows:

- *Neekam* (Treatment)
- *Niraivu* (Restoration)
- *Kaappu* (Prevention)

***Neekam* (Treatment)**

- விரேசனம்
- உள்மருந்து
- வெளிமருந்து
- பத்தியம்

***Virechanam*:**

"விரேசனத்தால் வாதம் தாழும்
வமனத்தால் பித்தம் தாழும்
நசிய அஞ்சனத்தால் கபம் தாழும்".
"அறிந்திடும் வாதம் அடங்கும் மலத்தினில்".

According to the body constitution and age of the patients, *Meganathakuligai* with hot water quantity was administered at early morning as purgative (*Kazhichal* Medicine) before starting the treatment to bring the vitiated *vaatham* to normal.

Internal Medicine: *Parangipattai chooranam*, two times a day with warm water.
External Medicine: *Sangamver thylam*

Anubanam:

"அனுபானத்தாலெ யவிழ்தம் பலிக்கும்
இனிதான சுக்குஇஞ்சி - பினுமுதுகால்
கோமயம்பால்முலைப்பால் கோநெய்தேன் வெற்றிலைநீர்
ஆமிதையா ராய்ந்து செய்யலாம்"

- ***தேரையர் வெண்பா***

***Pathiyam* (Dietary Regimen):**

In mild conditions of the disease, salt and tamarind can be taken in little quantities. When the condition is severe, tamarind should be avoided and salt must be consumed after frying.

"பத்தியத்தினானே பலனுண்டாகும் மருந்து
பத்தியங்கள் போனால்பலன் போகும் பத்தியத்தில்
பத்தியமே வெற்றி தரும் பண்டித்ர்க்கு ஆதலினால்
பத்தியமே உத்தியென்றுபால்"

- ***தேரையர் வெண்பா***

“பெருகுஞ் சோள மிறுங்கும் பெரும்கம்பு
வரகு காருடன் வாழையின் காயொடு
உரைகொள் பாகற் கெளிற்றுமீன் உண்டிடில்
விரிவ தாய்க்கரப் பானுமிகுந்ததே”

- பதார்த்த குண சிந்தாமணி

“புளிதுவர் விஞ்சு கறியார் புரிக்கும் வாதம்”

- பதார்த்த குண சிந்தாமணி

Diet Restriction (*Pathiyam*)

- Fish, crab, prawn are some sea foods should be avoided.
- Curd, Jaggery, oil, White gram should be avoided.
- Non vegetarian diet should be avoided.
- Alcohol beverages should be avoided.
- Brinjal should be avoided.
- In severe cases tamarind should be avoided.
- Dietary taken salt in minimum quantities.

***NIRAIVU*:**

Substances used for neutralizing the three humors are**:**

"ஒன்றிய வாத பித்த கபமிவையுயரா வண்ணம்
நன்றுறு கறிகளெல்லாம் நாளுமே சமைப்பராய்ந்த் தோர்
தின்றிடு மிளகு மஞ்சள் சீரக முயர்ந்த காயம்
வென்றி கொள் சுக் கோடேலம் வெந்தியம் உள்ளி சேர்த்தே"

-பதார்த்த குண சிந்தாமணி

The patients are well motivated. The nature and course of the disease is explained to them, Life-style modification advised.

Substances advised for *Vaatha* disease are**:**

“செங்கழுநீர் கோடைத் தேன்மிளகு நல்லெண்ணெய்
தங்கு பெருங்காயத் தழுதாழை - எங்கெங்கும்
கட்டு சிறு முத்து நெய் கோதில் உளுந்திவைகள்
வாட்டு மனிலத்தை மதி.”

-பதார்த்த குண சிந்தாமணி

Honey collected during summer, pepper, gingely oil, asafoetida, castor oil and black gram are very useful in *Vaatha* disease.

***KAAPPU* (Prevention)**

As per siddha system the aetiology of the diseases are various. The ultimate speciality of siddha system is to prevent the diseases.

In the siddha classical text *Patharthaguna chinthamani* has given so many ideal measures to prevent the diseases. These are given below

"திண்ண மிரண்டுள்ளே சிக்க வடக்காமற்
பெண்ணின்பா லொன்றைப் பெருக்காமல் உண்ணுங்கால்
நீர்சுருக்கி மோர்பெருக்கி நெய்யுருக்கி யுண்பவர்தம்
பேருரைக்கிற் போமே பிணி"

"ஆறு திங்கட் கொருதடவை வமனமருந் தயில்வோம்
அடர்நான்கு மதிக்கொருகாற் பேதியுறை நுகர்வோம்
தேறுமதி யொன்றரைக்கோர் தரநசியம் பெறுவோம்
திங்களரைக் கிரண்டுதரஞ் சவரவிருப்புறுவோம்
வீறுசதுர் நாட்கொருகால் நெய்முழுக்கைத் தவிரோம்
விழிகளுக்கஞ் சனமூன்று நாட்கொருகா லிடுவோம்
நாறுகந்தம் புட்பமிவை நடுநிசியின் முகரோம்
நமனார்க்கிங் கேதுகவை நாமிருக்கு மிடத்தே".

The *Siddhar Theraiyar* explains above lines are the rules to maintain healthy life and prevent diseases.

MODERN ASPECT

Anatomy of Skin

Skin is the outermost part of the human body which covers and protects the internal organs injurious effects of the environment and the harmful organisms. It is made up of three layers of the tissue.

- Superficial epithelial layer -The epidermis.
- Connective tissue layer - The dermis or Corium.
- Another Connective tissue layer loose in texture - The hypodermis or subcutaneous layer.

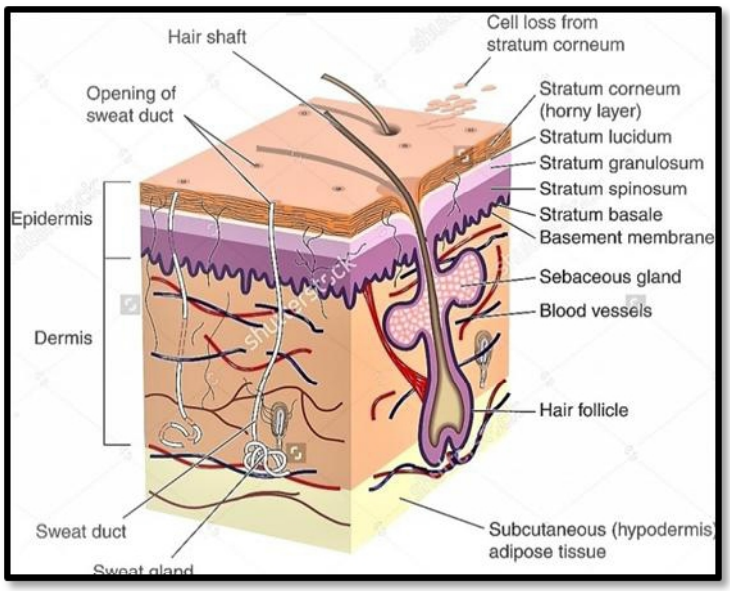
It has two appendages, hair and nail, two glands sweat gland (eccrine, apocrine glands) and sebaceous gland. The human skin shows 2 wide variations in structure.

1. Thick skin found in Scalp
   Ear lobes
   Palms
   Soles.

2. Thin skin over the rest of the body.
   - The average thickness of the skin is about 1 to 2 mm.
   - In the sole of the foot, palm of the hand and inter scapular region, it is considerably thick measuring about 5 mm.
   - Skin is very thinnest in eyelids and penis measuring about 0.5mm only

Layers of the skin

1. Epidermis
   - The epidermis is formed of nonvascular stratified epithelium.
   - The average thickness of the skin is between 0.07 mm to0.12 mm.
   - Certain parts like the soles of the feet and the palms of the hands it is very thick ranging from 0.8mm to1.4mm.
   - Squamous epithelium is 10 to 11 cells thick in the palms and soles.
   - Squamous epithelium is 3 to 4 cells over the eyelids.
   - The nutrition is provided to epidermis by the capillaries of dermis.
   - It has two main system keratinizing or malpighian system (keratinocytes) and pigmentary system (melanocytes) which produces the pigment.



In addition of four types of cells. These are

1. Keratinocytes
2. Melanocytes
3. Langherhans cell
4. Intermittent cells

In the epidermis, another unique cell known as Markel cell or Hascheiben or Touch cells here found at the base of epidermal ridges, which are in contact with nerve fibers, they are mostly present in palms, soles, nail beds, oral and genital epithelium, and act as slow touch receptors.

LAYERS OF EPIDERMIS:

Epidermis layer can be made out microscopically in a section of perpendicular to the skin surfaces, the following 5 main layers of the epidermis.

These are

1. Stratum germinatum
2. Stratum malpighii
3. Stratum granulosum
4. Stratum lucidum
5. Stratum corneum.

1. **SRATUM GERMINATUM:**
    - This is the deepest potion of the epidermis and it is composed of columnar cells placed perpendicular to the skin surface, it is also known as basal cell layer.
    - The whole of the epidermis germinates from this stratum hence the name" stratum germinatum"
    - Any trauma to this layer would result in scarring; trauma above the level of this layer heals without scarring.
    - Melanoblasts or melanocytes are found in this layer.
    - Stratum germinatum contain granules of pigment called melanin.

2. **STRATUM SPINOSUM:**
    - It is also known as stratum malpighii or the prickle cell layer.
    - It is superficial to the basal cell layer.
    - It is composed of several layers of polyhedral cells connected to each other by intercellular bridges.
    - Desmosomes present in this layer only.
    - Half size desmosomes occur on the under surface on the under surface of the basal cells, which play an important part in the anchoring the epidermis and dermis.
    - All keratinocytes adhere together by desmosomes.

3. **STRATUM GRANULOSUM:**
    - It is superficial to the stratum malpighii
    - It is composed of flat, fusiform cells which are one to three layers thick, the. Cells contain irregular granules of keratohyalin and lysosomal enzymes and cysteine rich proteins.
    - Lamellar granules also known as odland bodies.
    - These odland bodies take part in the waterproof barrier function of the epidermal permeability.

4. **STRATUM LUCIDUM:**
    - Superficial to the stratum granulosum.
    - It is pale, wavy looking layer known as stratum lucidum
    - It is made up of many layers of flattened epithelial cells.

- This layer contains retractile droplets of eleidin.

5. STRATUM CORNEUM:

- This is the most superficial layer, the outer surface of which is exposed to the atmosphere.
- It is also known as horny layer. It is outer most layers and consists of dead cells, which are called as corneocytes.
- It consists of many layers of non-nucleated, flattened, cornfied cells
- It is this layer which becomes thicker with the application of intermittent mechanical pressure.
- This layer is thickest in the palms of the hands and the soles of the feet, but thinnest on the outer surface of the lips, on the glans penis and the eyes.

DENDRITIC CELLS OF EPIDERMIS:

- These are melanocytes, Langerhans cells, and indeterminate cells
- The melanocytes are the pigment producing cells and are derived in foetal life from neural crest.
- The cells of Langerhans are found about the middle of epidermis.
- The junction of epidermis and dermis is formed by basement membrane
  (Basal lamina)

DERMIS: (CUTIS VERA OR CORIUM)

Dermis is profusely supplied with blood vessels, Thickness of dermis is 1 to 3 mm, it is made up of dense collagen fibres and fibroblasts. The collagen fibres contain the enzyme collagenase which is responsible for wound healing.

Dermis is made up of 2 layer, these are

1. Superficial papillary layer
2. Deeper reticular layer

SUPERFICIAL PAPILLARY LAYER:

- The layer projects in to the epidermis, it contain blood vessels, lymphatics and nerve fibers
- Dermal papillae are finger like projections arising from the superficial papillary dermis.

1. DEEPER RETICULAR LAYER:

- It is made up of reticular and elastic fibers.
- It is found around the hair, sweat glands and sebaceous glands.
- It also contain mast cells, Nerve ending, lymphatics and fibroblasts.

APPENDAGES OF THE SKIN:

The appendages of the skin are five these are,

1. Sweat gland
2. Sebaceous gland
3. Hair
4. Arrector pili muscle
5. Nails.

1. SWEAT GLAND:

These are 2 types

i. Eccrine gland.

ii. Apocrine gland.

ECCRINE GLAND:

- They are the ordinary, small sized 0.3 mm to 0.4 mm.
- Sweat glands are distributed all over the skin except on the beds of nail, margins of lips and the glans penis
- Over 3 million sweat gland present at birth.

APOCRINE GLAND:

- Glandular portion is very large and may measure 3 mm to 5 mm in diameter.
- They occur in the axilla, areola and nipples of breasts, umbilicus, around the anus and the genitalia.

- They are specialized sweat glands, and their secretion is odoriferous with a secondary sexual significance.

2. SEBACEOUS GLAND:

- They are scattered all over the integument in association with the hair follicles.
- They are absent from the hairless portions of the body like the palms of the hands, the soles of the feet.
- The ducts of the sebaceous glands are lined by stratified squamous epithelium which is continuous with the external sheath of the hair, and with the malpighian layer of epidermis.

3. HAIR:

- Hair is fund on almost every part of the body surface except on the palms, soles, the dorsal surface of the terminal phalanges, the inner surface of the labia, the inner surface of the prepuce and the glans penis.
- Hairs differ in length, thickness and colour in different parts of the body and in different races.
- There are three types of hair, long, short, thick bristles.
- Hair grows about 1-2 cm per month.
- Hair follicle and its hair can be anatomically divided in to 3 segments

  Infundibulam

  Isthumus

  Inferior.

4. ARRECTOR PILI:

- Arrector pili muscles are the small bundles of plain muscles fibers, which is extend from the connective tissue sheath of the hair follicles to the epiderm dermal junction.
- When these contract under the effect of cold or emotions.
- They move the hair into a more vertical portion is called appearance of "ghoose flesh"

5. **NAILS:**

- These are semitransparent, plate like horny structure, covering the dorsal surfaces of the distal phalanges of the fingers and toes.
- Nail parts are

Root
Nail plate
Nail bed
Lunula
Lateral and posterior nail fold

BLOOD VESSELS OF SKIN:

- The blood supply of the skin originates from the large number of arteries forming anastomosis in the deepest part of the dermis. From the single vessels run upwards and form a second network in the upper dermis.
- Finally terminal arterioles ascend in to the papillae ending in capillary loops, which drain into connective venules.
- The blood is returned to the large veins in the subcutaneous tissues.

LYMPHATICS OF THE SKIN:

- The skin contains a rich network of lymphatics which drains in to a larger vessel in the hypodermis.

NERVE SUPPLY OF SKIN:

- The nerve supply of the skin consists of a motor sympathetic portion derived from the sympathetic ganglia.
- Sensory spinal portion arising from the dorsal root ganglia.

PHYSIOLOGY OF SKIN:

The skin performs a multiple of functions, though the primary function of skin is the protection of organs, it has many other important functions.

These are

1. Protective function.
2. Sensory function.
3. Storage function.
4. Synthetic function.

5. Regulation of body temperature.
6. Regulation of water and electrolyte balance.
7. Excretory function.
8. Absorptive function.
9. Secretory function.
10. Gaseous exchange.

1. PROTECTIVE FUNCTION:

Skin forms the covering of all organs of the body and protects these organs from the following factors:

i. Bacteria and toxic substances
ii. Mechanical flow
iii. Ultraviolet rays.

2. SENSORY FUNCTION:

Skin is considered as the largest sense organs in the body. It has many nerve endings, which form the specialized cutaneous receptors. These receptors are stimulated by the sensations of touch, pain, pressure or temperature sensation and convey these sensations to the brain via afferent nerves.

3. STORAGE FUNCTION:

Skin stores fat, waters, chlorides and sugar. It can also store blood by the dilatation of the cutaneous blood vessels.

4. SYNTHETIC FUNCTION:

Vitamin D_3 is synthesized in skin by the action of ultraviolet rays on cholesterol.

5. REGULATION OF BODY TEMPERATURE:

Skin plays an important role in the regulation of body temperature. Excess heat is lost from body through skin by radiation, conduction and evaporation.

6. REGULATION OF WATER AND ELECTROLYTE BALANCE:

Skin regulates water balance and electrolyte balance by excreting water and salts through sweat.

7. EXCRETORY FUNCTION:

Skin can excrete small quantities of waste materials like urea, salts and fatty substances.

8. ABSORPTIVE FUNCTION:

Skin can absorb the fat soluble substances and some ointments.

9. SECRETORY FUNCTION:

Skin regulates sweat through sweat glands and sebum through sebaceous glands. Sebum keeps the skin smooth and moist.

10. GASEOUS EXCHANGE:

A small amount of gaseous exchange through the skin.

EMBRYOLOGY OF THE SKIN:

The whole of the skin epidermis and dermis is a unified integrated organ system, but it develops from two different primitive embryonic layers epidermis from the ectoderm and dermis from the mesoderm.

MODERN ASPECT OF *KAALANJAGA PADAI* (PSORIASIS)

INTRODUCTION:

The word psoriasis is derived from the Greek word **"PSORA"** meaning **"ITCH" or "RASH"**. It has been known since ancient times and was originally considered a type of leprosy, It is one of the most common human skin diseases.

Psoriasis was considered to be a chronic inflammatory dermatosis, it is now considered a multifactorial disorder that has several factors like genetic predisposition, Environmental, immunologically mediated inflammation and several modifying factors including obesity, Trauma, infection are involved in psoriasis.

DEFINITION:

It is a common chronic and non-infectious skin disorder, characterized by dry erythematous plaques, well defined slightly raised covered by a white silvery scales typical in extensor distribution, it affects all over the body.

EPIDEMIOLOGY:

1. **PREVALANCE:**
    - It has distributed in world wide.
    - Fairly common in the tropical countries.
    - It is pandemic in temperate climate.
    - Attacks are more common in winter than summer.
    - Natural tendency to clear up with the warm weather.
    - A fair number of attacks develop in the monsoon.
    - It affects 0.6%-4.8% of people worldwide.
    - 150,000-260,000 new cases of psoriasis are diagnosed each year.
    - About 400 people die from complications caused by psoriasis every year.
    - About 11% patients have psoriatic arthritis.
    - Plaque type is most common in 80% of psoriasis patients.

2. **AGE OF ONSET**:
    1. First peak of onset between 20-30 yrs.
    2. Second peak of onset between 50-60 yrs.
    3. Early onset family history present.
    4. Late onset family history is not present.

3. **SEX:**
    - Men and women are equally affected.

4. **SEASON**:
    - Most patients worse in winters.

AETIOLOGY:

1. The exact cause is unknown- AUTOIMMUNE DISEASE
2. Stress.
3. Disturbed fat metabolism.
4. Hormonal imbalance.
5. Septic focus.
6. Allergy.
7. Anxiety states.

8. Lowered response of the cyclic AMP system to prostaglandin E_1 in epidermis.
9. Mental trauma.
10. Fever.
11. Digestive upsets.
12. Physical injury:
    - Scratches.
    - Surgical incisions and injuries.
13. Infection:
    - β - Hemolytic streptococcal infection- precipitates guttate lesions.
    - HIV infection-Explosive psoriasis.
14. Heredo familial and Genetic factors:
    - Increased in familial cases.
    - Greater concordance in monozygotic twins (70%)
    - Dizygotic twins (30%)
    - Increased association of HLA- CW6 20 times increased risk with early onset of psoriasis.

PRECIPITATING FACTORS:

- Diabetic's mellitus.
- Psychological stress.
- Hot water bathing
- Skin dryness.
- Obesity.
- Local Pressure.
- HIV
- Trauma.
- Purines in the diet.
- Identical twins.
- Immune system reacting to skin cells.
- Microbes.
    i. Staphylococcal aureus
    ii. Candida albicans.

- **Drugs:**
    i. Anti-malarial drugs.
    ii. Lithium.
    iii. Beta adrenergic blockers drugs.
    iv. NSAID drugs.
    v. Corticosteroid withdrawal may aggravate psoriasis.(Pustular psoriasis)

PATHOGENESIS OF PSORIASIS:

Psoriasis appears to be largely a disorder of keratinization

↓

The basic defect is rapid replacement of epidermis in psoriatic lesion.

3 to 4days instead of 28 days in normal skin.

↓

There are marked vascular changes in upper dermis in the form of

Recently the presence of abnormal neural cells has been demonstrated in

Psoriatic plaques.

PATHOGENESIS OF PSORIASIS

- Psoriasis was long considered either a disorder of keratinocytes growth or a chronic inflammation.
- Advancement in immunologic techniques and in genetic analyses has resulted in a reappraisal of the pathophysiology involved.
- Psoriasis consider as an organ specific autoimmune disease that is triggered by an activated cellular immune system and it similar to other immune mediated disease.
- The definition of autoimmune disease as **" a clinical syndrome caused by the activation of T cells and B cells, or both, in the absence of an ongoing infection or other discernible cause"**
- Pathogenesis of psoriasis still poses a challenge to the scientific community to once and for all, establish how and why it occurs and consequently to develop the magic drug to treat it.
- Psoriasis is an immunological disease, characterized by interplay of

I. Immunological factors.
II. Cellular components.
III. Signalling molecules.
IV. Biochemical changes.
V. Histological changes.

These are plays major role in pathogenesis.

I. IMMUNOLOGICAL FACTORS IN PSORIASIS:

Both innate or acquired immune changes are thought be responsible for the Development of psoriatic plaques

↓

Different types of helper T subsets, dendritic cells, plasmacytoid dendritic cells as well as Langerhans cells have been found to play a role in psoriasis.

↓

T cells plays important role in psoriasis

↓

Autoimmunity as a major factor in pathogenesis.

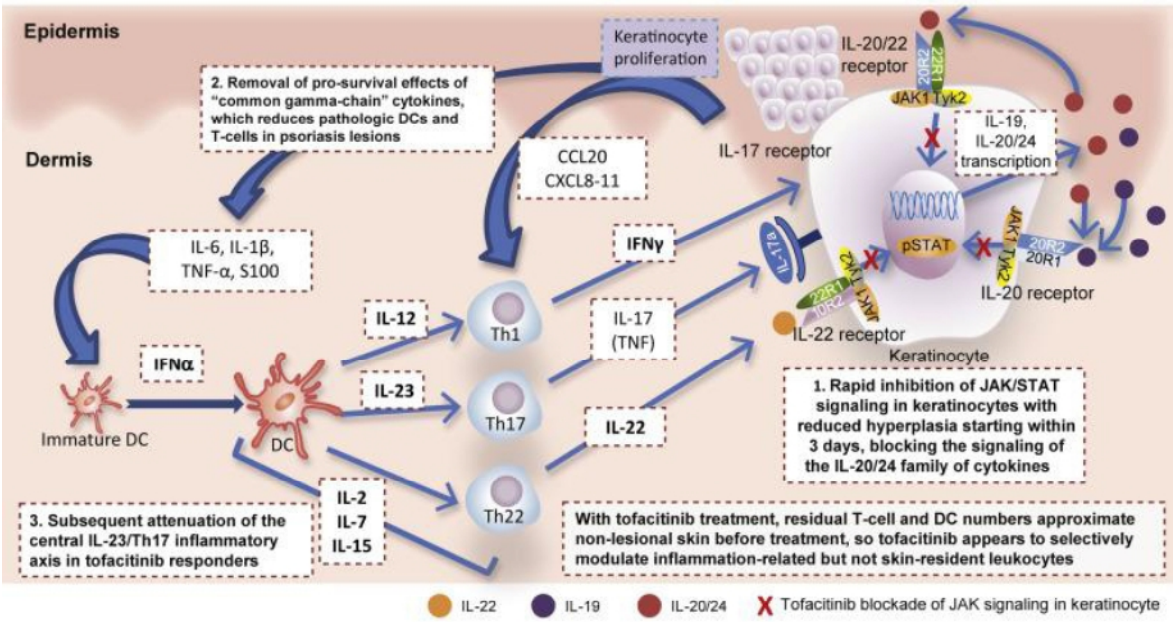
↓

The presence of T cells in the inflammatory infiltrate in psoriatic plaque obviously Indicated in immune mediated or an autoimmune basis for the Pathogenesis of psoriasis.

II. CELLULAR COMPONENTS IN PATHOGENESIS OF PSORIASIS:

Cellular components are

a) T cells
b) Keratinocytes
c) Langherhans



CELLULAR COMPONENTS OF PSORIASIS

A. T CELLS:

- T cells play a key role, with the epidermal T cells being CD8+ & Dermal cells being CD4+.
- These cells include memory T cells, natural killer cells T cells& Th17& Th22.
- Th17& Th22 cells which are subsets of CD4+ cells are now considered important in pathogenesis of the psoriatic plaque.
- They are stimulated by IL-23 & respectively produce IL-17& IL-22 which mediate dermal inflammation and epidermal hyperplasia.

B. KERATINOCYTES:

- Keratinocytes cells express transcription factor STAT- 3, which may be pathogenic.

C. LANGERHANS CELLS:

- Langherhans cells secrete cytokines, which are mitogenic and chemotatic.

III. SIGNALLING MOLECULES IN PATHOGENESIS OF PSORIASIS:

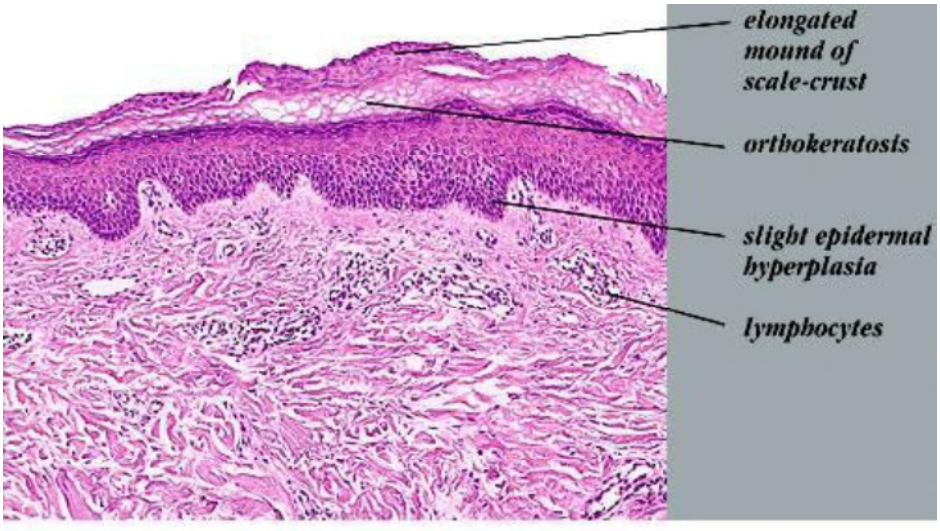
- Include cytokines growth factors like interleukins, Chemokines, Interferon's and their respective receptors.
- Characterized by up regulation of Th1 cytokines and reduction of anti-inflammatory cytokines IL-10.
- Other important molecules include TNF-α, IL-15, IL-17, IL-22 and IL-23

IV. BIOCHEMICAL CHANGES IN PATHOGENESIS OF PSORIASIS:

- Cyclic nucleotide increased levels in cGMP or decreased levels of camp.
- Arachidonic acid level is increased and it metabolites.
- Polyamines also increased in levels.
- PROTEINASE: increased in levels of plasminogen activator and their inhibitors.
- Calmodulin also increased in levels.

V. HISTOLOGICAL CHANGES IN PATHOGENESIS OF PSORIASIS:

- Epidermal changes is increased epidermal proliferation in two ways
- One is increased growth fraction from normal of 30 to 100% in psoriasis.
- 2nd is shortened epidermal turn over time from normal of 60 to10 days in psoriasis.
- Important changes seen in dermal layer.
- Include dilated and tortuous capillary loops and proliferation of fibroblasts.



MOST COMMON SITES:

AREAS COMMONLY AFFECTED:

- Scalp
- Back of elbows
- Front of knees and legs
- Lower part of the back of the trunk

MAY ALSO BE AFFECTED:

- Nail
- Sole
- Palm

RARELY AFFECTED:

- Mucus membrane

CLINICAL FEATURS OF PSORIASIS:

- Typical distribution is extensor
- Lesions are bilaterally symmetrical
- Typical coin shaped lesion
- Big plaques of the size of palm of the hand
- The lesions are slightly raised above the surface of skin
- Absence of itching
- But itching present in tropical countries
- Slight or moderate purities present
- Secondary psychogenic stress present
- Secondary lichenification present
- Scalp is involved almost all cases
- No matting of hair
- Nail also involved 3types of lesion
    I. Pitting
    II. Seperation of nail from the nail bed and walls
    III. Thickening of the nail and collection of hyperkeratotic debris under the nail.
- The palms of the hands and soles of the feet also involved in patches of hyperkeratosis and fissures on erythematous bases.

IMPORTANT SIGNS OF PSORIASIS:

1. Candle grease sign.
2. Auspitz sign.
3. Koebner's phenomenon.

1. CANDLE GREASE SIGN :

Psoriatic lesion is scratched with the point of a dissecting forceps a candle grease like scale can be repeatedly produced even from the non scaling lesions this is called candle grease sign.

2. AUSPITZ SIGN:

The complete removal of scale produces pin point bleeding.

3. KOBNER'S PHENOMENON:

Psoriatic lesions may develop along the scratch lines in the active phase this is called Koebner's phenomenon.

SITES OF PREDILECATION OF PSORIASIS:

- Lesions are usually bilaterally Symmetrical.
- Favours pressure points are extensor surface of
  - Elbows
  - Knee
  - Scalp
  - Fore head
  - Nape of neck
  - Trunk
  - Buttocks
  - Lumbosacral region
  - Periumblical area
  - Palms and soles.
- Usually with lesions at other sites, but sometimes in isolation.
- Infrequent involvement of photo exposed sites, involvement of face uncommon and indicates refractory psoriasis.
- Intertriginous involvement in flexural psoriasis.

CLINICAL TYPES OF PSORIASIS:

CLASSIFICATION:

Psoriasis is classified based on its onset, evolution and morphology into

1. Chronic plaque psoriasis (psoriasis vulgaris)
2. Acute guttate psoriasis
3. Pustular psoriasis

1. CHRONIC PLAQUE PSORIASIS:

There are several variants of chronic plaque psoriasis

A) MORPHOLOGICAL VARIANTS:

a) Small plaque psoriasis
b) Rupioid psoriasis
c) Para psoriasis

B) VARIATION OF MORPHOLOGY DUE TO SITE:

a) Flexural psoriasis
b) Annular psoriasis
c) Scalp psoriasis(Corona psoriatica)
d) Penile psoriasis
e) Psoriasis of palms and soles (psoriasis inverses)

ASSOCIATIONS OF PSORIASIS:

In a patient with chronic psoriasis, always check for nails and joint involvement.

a) Psoriatic nails
b) Musculoskeletal system(Psoriasis arthopathica)
c) Metabolic syndrome.

1. CHRONIC PLAQUE PSORIASIS(CPP):

Chronic plaque psoriasis is the commonest form of psoriasis

MORPHOLOGY:

The prototype lesion of **CPP** is a mildly itchy papule which is

- Well demarcated
- Erythematous - Deep pink to red

- White silvery scales, but is profuse adherent in elephantine
- Indurated and raised.
- Size and number of lesions variable
- Koebner's phenomenon +ve
- Auspitz sign +ve

A) MORPHOLOGICAL VARIANTS:

a) SMALL PLAQUE PSORIASIS(SPP):

- Smaller 1- 2cm lesions
- Resemble like guttate psoriasis
- SPP occurs in older patients
- It is scalier and has a more chronic course.

b) RUPINOID PSORIASIS:

- Lesions with heaped up scales so appear conical
- Scales are firmly adherent to the underlying skin look like limpet
- Lesions are classically present in Reactive arthritis(Reiter's syndrome)
- Characterized by HLA B27 +ve, Antecedent infection, Arthritis, Conjunctivitis, Keratoderma blennorrhagicum.

c) PARA PSORIASIS:

- Para psoriasis is a group of rather infrequent, idiopathic and asymptomatic erythrodermic or scaly papule dermatoses.
- It is a non specific reaction pattern of the skin which may represent an intermediary stage of psoriasis.

B) VARIATION OF MORPHOLOGY DUE TO SITE:

a) FLEXURAL PSORIASIS:

- Commonly occurs in elderly females, because lesions are present in moist friction prone areas**.**
- Lesions are well defined and erythematous (Salmon pink)
- Occurs in flexure like the axilla, inframammary folds, vulva and gluteal cleft.

b) ANNULAR PSORIASIS:

- The central clearing of the circular lesions produces ringed lesion.

c) SCALP PSORIASIS:

- Lesions may occur along the scalp border is called corona psoriatica.
- Sharply defined, indurated, scaly plaques present.
- Scaling looks like Asbestos, especially on the occipit.

d) PENILE PSORIASIS:

- In uncircumcised males, scaling is absent on glans but lesions continue to be erythematous and well defined.
- In circumcised patients, the lesions on the glans are similar to psoriatic lesions.

e) PSORIASIS OF PALMS AND SOLES:

- Lesions are bilaterally symmetrical (Psoriasis inversus)
- Lesions are well defined, Symmetrical, erythematous, thick plaques with white silvery scales may be profuse or minimal.

2. ACUTE GUTTATE PSORIASIS:

- Occurs in children and adolescents
- May be precipitate by streptococcal tonsillitis
- Lesions appear in several crops of small, erythematous papules with minimal scaling
- Side of predilection is trunk.

3. PUSTULAR PSORIASIS:

- It occurs mostly in withdrawal of topical or systemic steroids
- **LOCALIZED:** In chronic plaque psoriasis, when plaques are surrounded with pustules
- Pustules and crusts are seen on distal part of fingers and in nail bed
- **GENERALISED: Is a serious condition**
- Constitutional symptoms like high fever, chills and tachypnea seen
- Is characterized by generalized fiery red Erythema followed by appearance of waves of tiny.
- Appearances of new pustules as the old ones are crusting.

ASSOCIATION OF PSORIASIS:

NAIL PSORIASIS:

- Nail changes due to
  - Nail matrix psoriasis
  - Nail bed psoriasis
- Nail matrix psoriasis: Manifests as pitting
- Nail bed psoriasis: Nail plate thickening, subungual hyperkeratosis, discoloration and dystrophy of nail plate, oncholysis and oil spots are specific for psoriasis.

A. MUSCULOSKELETAL SYSTEM (PSORIASIS ARTHOPATHICA):

- Dactylitis and enthesitis is typically seen there are also seen 5 clinical patterns seen these are
  - Asymmentrical oligoarthritis
  - Symmetrical rheumatoid arthritis
  - Distal inter phalangeal arthritis
  - Arthritis mutilans
  - Axial arthritis

B. METABOLIC SYNDROME:

In patients with psoriasis, there is an increased prevalence of

- Hypertension
- Diabetes mellitus (Insulin resistance)
- Obesity
- Dyslipidemia
- Coronary artery disease

COMPLICATIONS

Complications of psoriasis may include the following: Secondary infections, Psoriatic arthritis, possible increased risk of lymphoma, cardiovascular disease, ischemic heart disease, and Mitral valve prolapse. Among these, Psoriatic arthritis is a major complication. *(*Ref: ard.bmj.com › Volume 64, Issue suppl 2*)*

Psoriatic arthritis facts

- About one in 10 people with psoriasis also develop inflammation of joints (psoriatic arthritis).
- The first appearance of the skin disease (psoriasis) can be separated from the onset of joint disease (arthritis) by years.
- Psoriatic arthritis belongs to a group of arthritis conditions that cause inflammation of the spine (spondylo arthropathies).
- Patients with psoriatic arthritis can develop inflammation of tendons, cartilage, eyes, lung lining, and, rarely, the aorta.

(Ref: http://www.medicinenet.com/psoriatic_arthritis/article.htm)

Risk for psoriatic arthritis:

Affecting men and women equally, about 10% to 30% of people with psoriasis develop psoriatic arthritis. Psoriatic arthritis may develop at any age, but usually affects people between the ages of 30 and 50. While the cause is not known, genetic factors, along with the immune system likely play a role in determining who will develop the disorder.

As many as 40% of people with psoriatic arthritis have a family history of skin or joint disease. Having a parent with psoriasis triples the chance of getting psoriasis yourself and thus increases the chance of developing psoriatic arthritis.

Different types of psoriatic arthritis:

There are five types of psoriatic arthritis. It is important to know which type of psoriatic arthritis you have and to understand the characteristics so that it may be treated properly.

Symmetric psoriatic arthritis:

Symmetric arthritis affects the same joints usually in multiple matching pairs on opposite sides of the body. Symmetric psoriatic arthritis can be disabling, causing varying degrees of progressive, destructive disease and loss of function in 50% of people with this type of arthritis. Symmetric psoriatic arthritis resembles rheumatoid arthritis.

Asymmetric psoriatic arthritis:

Asymmetric arthritis typically involves one to three joints in the body large or small such as the knee, hip, or one or several fingers. Asymmetric psoriatic arthritis does not affect matching pairs of joints on opposite sides of the body.

Distal interphalangeal predominant (DIP):

It involves primarily the small joints in the fingers and toes closest to the nail. DIP psoriatic arthritis is sometimes confused with osteoarthritis, a chronic disease that causes the deterioration of joint cartilage and bone as well as bone spurs at the joints.

Spondylitis:

Spondylitis affects the spinal column and may cause inflammation and stiffness in the neck, lower back, spinal vertebrae, or sacroiliac region (pelvic area), making motion difficult. Spondylitis also can attack connective tissue, such as ligaments, or cause arthritic disease in the joints of the arms, hips, legs, or feet.

Arthritis mutilans:

Arthritis mutilans is a severe, deforming, and destructive form of psoriatic arthritis that primarily affects the small joints in the fingers and toes closest to the nail. This leads to lost function of the involved joints. It also is frequently associated with lower back and neck pain. Fortunately, this type of psoriatic arthritis is rare.

(Ref: http://arthritis.webmd.com/psoriatic-arthritis/default.htm).

SEVEARITY OF PSORIASIS:

- A PASI score is a tool used to measure the severity and extant of psoriasis (Psoriasis area and severity index), it takes few minutes and experience to calculate it accurately.
- A representative area of psoriasis is selected for each body region. The intensity of redness, thickness, scaling of the psoriasis is assessed as none (0) , mild(1), moderate(2), severe(3), very severe(4).
- The percentage area affected by psoriasis is evaluated in the four regions of the body. In each region the area expressed as nil(0), 1-9%(1), 13-29(2), 30-49%(3), 50-69%(4), 70-89%(5), 90-100%(6).
- Head and neck, upper limbs, trunk, lower limbs calculations for area, each of the body area scores is multiplied by the area affected.

DIFFERENTIAL DIAGNOSIS

Nummular eczema

Rounded, circular desquamative **erythematous** lesions covered with vesicles, crusts, and scales, very itchy. Patients have whether atopic or allergic diathesis. Epicutaneous allergy tests are frequently positive.

Pityriasis rubra pilaris

In typical cases follicular papules and infiltrating scales are observed as well as typical hyperkeratosis.

Lichen simplex chronic

This disease shows dry and itchy oval **plaques** and resembles psoriasis as a shape but not have silvery scales Auspitz and candle signs. And shows violaceous tint.

Pityriasis alba

It shows a white plaque, like psoriasis but have not an erythema. It has been seen only face. Psoriasis usually affects more than one area of the body. Red skin covered with greasy-looking white or yellowish scales.

HISTOPATHOLOGICAL CHANGES

EPIDERMAL CHANGES:

- Parakeratosis
- Loss of granular layer and regular acanthosis
- Supra papillary thickening
- Collection of polymorphs in the epidermis to form spongiform pustule of kogoj and Munro's micro abscess seen in epidermis.

DERMAL CHANGES:

- Dilatation and tortuosity of capillary loops in the dermal papillae
- Lymphocytic infiltrate in the upper dermis is seen.

HISTOLOGICAL CHANGES:

- Thinning of supra papillary portion of stratum malpinghii
- Elongation of ridges
- Oedema and clubbing of papillae seen in histological study.

HISTOCHEMICAL CHANGES:

- Histochemical studies have revealed an increase in both oxidative and anaerobic metabolism with increased pentose, glycon, purines, sulphydral groups, soluble proteins increased in level.
- Decreased in activity of dipeptidases.
- It has been discovered that apparently normal skin of both the psoriatics and their relations show these changes in miniature is called latent psoriasis.

RADIOLOGICAL CHANGES:

- . Simultaneous presence of ankylosis, periosteal new bone formation, erosions and osteolytis are strongly suggestive of psoriatic arthritis.

RULE OUT OTHER TEST FOR PSORIASIS:

- Metabolic syndrome, diabetes, hypertension and dyslipidemia
- Hypocalcaemia especially in pustular psoriasis
- Anaemia and hypoproteinemia in erythrodermic psoriasis.

DIAGNOSIS OF PSORIASIS

There are no laboratory tests which will positively identify psoriasis. The blood count, Urine analysis, ESR and other hematologic chemical and serologic studies are within normal limits in most cases of psoriasis.

The diagnosis of psoriasis is based upon:

1. The family history of psoriasis
2. The typical distribution of the lesions on the scalp, elbows, knees, the front of the legs, back and nails
3. Well-defined non-indurated dry erythematous areas with silvery layer-upon-layer scaling
4. The candle – grease sign (when a psoriatic lesion is scratched with the point of a dissecting forceps, a candle-grease-like scale can be repeatedly produced even from the non-scaling lesions. This is CG sign)
5. Auspitz sign (Complete removal of a scale produces pin-point bleeding)
6. Koebner's phenomenon (Psoriatic lesions may develop along the scratch lines in the active phase)
7. Little or no itching
8. History of previous attacks and seasonal variations of the disease.

TREATMENT OF PSORIASIS PATIENTS:

Depending on the type of psoriasis, various therapeutic options are available

- Topical agents like liquid paraffin, petroleum gel, vegetable oils etc.
- Systemic agents like Methotrexate, Acitretin, and Cyclosporine.
- Corticosteroids mostly in cream base.
- Photochemo therphy and phototherapy in PUVA methods.
- Biological response modifiers used in treatment of psoriasis.

DIET FOR PSORIASIS PATIENTS:

TO TAKE:

1. All green leafy vegetables.
2. Low consumption of animal fats and the quantity of food.
3. High protein diet
4. Fish and sea foods
5. Carrot
6. Tomatoes
7. Grains.

TO AVOID:

1. Oil foods.
2. High fat diet
3. Alcohol
4. Junk foods
5. Red meat
6. Dairy products
7. Night shade vegetables
8. Citrus fruits
9. Gluten protein in diet
10. Condiments.

PROGNOSIS:

- A permanent cure is not yet known
- Individual attacks can, almost always controlled satisfactorly
- Disease non infectious

- The disease does not leave scar
- Flexural, erythrodermic and pustular psoriasis take longer to heal than the typical variety
- The palmar and nail lesions are rather resistant to treatment.
- Patient suffer from the disease on and off throughout their lives.
- Complications in psoriasis are infrequent.

MANAGEMENT:

- The general health of the patient should be maintained.
- The patient's life should be regulated so that no undue stress affects either body (or) mind.
- A moderate, warm climate, frequent sunbaths before the onset of the winter, and visits to sulphur springs, all of which are useful in bringing down the relapse rate.

DRUG REVIEW

Preparation of trial drugs: Internal medicine *-Parangipattai chooranam*

Ingredients:

Parangi pattai (*Smilax china*) - 175 grams (*5 Palam)*

Ammukkara ver (*Withania somnifera*)
Sangam kuppi ver (*Azima tetracantha*)
Siru pirappan kizhangu (*Calamus rotang*)
Kondrai pattai (*Cassia fistula*) -35grams *(1 Palam)*
Saaranai ver (*Trianthema decandra*)
Kodiveli ver (*Plumbago zeylanica*)

Adhimadhuram (*Glycyrrhiza glabra*)
Koththa malli (*Coriandrum sativum*)
Omam (*Trachyspermum ammi*)
Adhividaiyam (*Aconitum heterophyllum)*
Vaal milagu (*Piper cubeba*)
Vendhayam (*Trigonella foenum-graecum*)
Sitraraththai (*Alpinia officinarum*)
Akkara kaaram (*Anacyclus pyrethrum*)
Thippili (*Piper longum)* 15.3grams *(3 Kazhanju*)
Saadhikkai (*Myristica fragrans*)
Saadhipathiri (*Myristica fragrans)*
Kiraambu (*Syzygium aromaticum*)
Karuncheeragam (*Nigella sativa*)
Seeragam(Cuminum cyminum)
Chukku (*Zingiber officinalae*)
Milagu (*Piper nigrum*)

Paal (Milk) - 5.3 lit *(4 Padi)*

Sarkarai (Sugar) - An half the amount of *chooranam*.

EXTERNAL MEDICINE: *SANGAMVER THYLAM*

Ingredients:

Sangam kuppi ver (*Azima tetracantha*)		- 875 grams (1/4 Thulaam)
Milagu (*Piper nigrum*)	}	- 35 grams (1 Palam)
Karuncheeragam (*Nigella sativa*)		
Maasikkai (*Quercus infectoria*)		
Ealam (*Elettaria cardamonum*)		
Neer (Water)		- 21.5 lit (1 Dhuni)
Nallennai (Gingelly oil)		- 1.34 lit (2 Padi)
Paal (Milk)		- As per requirement

PROPERTIES OF TRIAL DRUGS

INTERNAL MEDICINE: *PARANGIPATTAI CHOORANAM*

1. PARANGIPATTAI

Botanical name	-	Smilax china
English name	-	China root
Family	-	Liliaceae

Organoleptic characters

Taste	-	Inippu
Potency	-	Thatppam
Division	-	Inippu

General properties

தாகம் பலவாதந் தாதுநட்டம் புண்பிளவை
மேக கிரந்தி வீழ்மூலந்-தேகமுடன்
குட்டை பகந்தமேற் கொள்வமனம் போம்பறங்கிப்
பட்டையினை யுச்சரித்துப் பார்.

- தேரையர் குணவாகடம்

Actions

- Alterative
- Anti-syphilitic
- Aphrodisiac
- Depurative

Chemical constituents

- Sarsaponin
- Parallin
- Stigmasterol
- Daucosterol
- Isoeryl-S-methyl-cysteamine sulphoxide

2. AMMUKKARA VER

Botanical name	-	Withania somnifera
English name	-	Winter cherry
Family	-	Solanaceae

Organoleptic Characters

Taste	-	Kaippu
Potency	-	Veppam
Division	-	Kaarppu

General properties

கொஞ்சந் துவர்ப்பாங் கொடியகயம் சூலையரி
மிஞ்சுகரப் பான்பாண்டு வெப்பதப்பு-விஞ்சி
முகசுவுறு தோடமும்போ மோகம் அன லுண்டாம்
அசுவகந் திக்கென்றறி.

- **அகத்தியர் குணவாகடம்**

Actions

- Diuretic
- Tonic
- Febrifuge
- Alterative
- Aphrodisiac

Chemical constituents

- Somniferine
- Withanine
- Perinponyine
- Tropine
- Anahygrine

3.SANGAMKUPPI VER

Botanical name	-	Azima tetracantha
English name	-	Misteletoeberry thorn
Family	-	Salvadoraceae

Organoleptic charecters

Taste	-	Kaippu
Potency	-	Veppam
Division	-	Kaarppu

General properties

வீக்கம் கரப்பான் விதாகம் கிரந்திகுன்மம்
ஊக்கமிகு சூலைவாய் வோடுபித்தத்-தாக்குவிடம்
வீறுமோ கண்துலங்கும் வீசுபசி ரத்தமுண்டாம்
கூறுசங்கம் வேரிலை கட்கு.

- அகத்தியர் குணவாகடம்

Actions

- Diuretic
- Anti-periodic
- Tonic
- Expectorant
- Stimulant

Chemical constituents

- Azimine
- Maltol
- Benzyl chloride
- Furancarboxaldehyde

4. SIRUPPIRAPAN KIZHANGU

Botanical name	-	Calamus rotang
English name	-	Cane
Family	-	Arecaceae

Organoleptic characters

Taste	-	Kaarppu
Potency	-	Veppam
Division	-	Kaarppu

General properties

தந்தரோ கத்தைத் தணியாத வாதத்தை
உந்துசூ லைப் பிடிப்பை யோட்டுங்காண்-வந்து
கரப்புந் திறப்புமெனக் காட்டுநகை மாதே
பிரப்பங் கிழங்கதனைப் பேணு.

- அகத்தியர் குணவாகடம்

Chemical constituents

- Saponins
- Alkaloids
- Flavanoids

Actions

- Expectorant
- Anti-vatha

5. KONDRAI PATTAI

Botanical name	-	Cassia fistula
English name	-	Pudding pipe tree
Family	-	Fabaceae

Organoleptic characters

Taste	-	Thuvarppu
Potency	-	Veppam
Division	-	Kaarppu

General properties

குட்டம் கிருமி கொடுஞ்சூலை வாதமையம்
துட்ட மலமருசி தூப்போம்-தட்டி
சுரக்கின்ற பேதி யுண்டாம் துய்க்கத் துவர்க்கும்
சரக்கொன்றைக் காரணங்கே சாற்று.

- **அகத்தியர் குணவாகடம்**

Chemical constituents

- Fistulic acid
- Rhein
- Tryphtophan
- Aspartic acid
- Glutamic acid
- Leucine
- Glucose
- Argenine

Actions

- Laxative
- Vermifuge
- Febrifuge

6. SAARANAI VER

Botanical name	-	Trianthema decandra
English name	-	Horsepurslane
Family	-	Aizoaceae

Organoleptic characters

Taste	-	Kaippu
Potency	-	Veppam
Division	-	Kaarppu

General properties

சீதஞ் சலதோடந் தேமல்த மும்புகுன்மம்
வாதஞ் சிறுசிரங் வன்மேகம் - ஓதரிய
காசமுதல் நோயெல்லாங் கான்சா றடைக்கிழங்கால்
நாசமுறு மென்றே நவில்.

- அகத்தியர் குணவாகடம்

Chemical constituents

- Tanins
- Flavanoides
- Ethyl acetate
- Glucose

Actions

- Expectorant
- Diuretic
- Laxative

7. KODIVELI VER

Botanical name	-	Plumbago indica
English name	-	Ceylon lead -wort
Family	-	Plumbaginaceae

Organoleptic characters

Taste	-	Kaarppu
Potency	-	Veppam
Division	-	Kaarppu

General properties

கட்டிவிரணங்கிரந்தி கால்கள் அரையாப்பு
கட்டிச்சூ லைவீக்கங் காழ்மூலம்-முட்டிரத்தக்
கட்டுநீ ரேற்றங் கனத்த பெருவயிறும்
அட்டுங் கொடிவேலி யாம்.

- அகத்தியர் குணவாகடம்

Chemical constituents

- Plumbagic acid
- Methylester
- Lupeol
- Uridine

Actions

- Anti-periodic
- Diaphoretic
- Tonic
- Stomachic

8. ATHIMATHURAM

BOTANICAL NAME	-	Glycyrrhiza glabra
ENGLISH NAME	-	Liquorice root
FAMILY	-	Fabaceae

Organoleptic characters

Taste	-	Inippu
Potency	-	Seetham
Division	-	Inippu

General properties

கத்திரி முப்பிணியால் வருபுண் தாக
கண்ணோய் உன் மாதம்விக்கல் வலிவெண்குட்டம்
பித்தம்மெலும் புருக்கி கிரிச்சரம் ஆவர்த்த
பித்தமத மூர்ச்சை விட பாகம்

- தேரையர் குணவாகடம்

Actions

- Emolient
- Demulcent
- Mild expectorant
- Tonic

Chemical constituents:

- Glycyrrihizin
- Liquiritigenin
- Liquiritin
- Iso liquiritigenin
- Formonetin
- Licuraside

9. KOTHAMALLI

Botanical name	-	Coriandrum sativum
English name	-	Coriander seeds
Family	-	Umbelliferae

Organoleptic characters

Taste	-	Kaarppu
Potency	-	Seethaveppam
Division	-	Kaarppu

General properties

கொத்துமல்லி வெப்பம் குளிர்காய்ச்சல்பித்தமந்தஞ்
சர்த்திவிக்கல் தாகமொடு தாமொடு தாதுநட்டம்-சுத்தயேழும்
வாத விகார்மடர் வன்கர்த்த பிவிரணம்
பூதலத்தில் லாதகற்றும் போகூழ்

- அகத்தியர் குணவாகடம்

Chemical constituents

- Gnaphaloside
- Quercetin
- Rutin
- Luteolin
- Coriandrones

Actions

- Stomachic
- Stimulant
- Diuretic
- Carminative

10.OMAM

Botanical name	-	Trachyspermum ammi
English name	-	Bishop's weed
Family	-	Apiaceae

Organoleptic characters

Taste	-	Kaarppu
Potency	-	Veppam
Division	-	Kaarppu

General properties

சீதசுரங் காசஞ் செரியாமந் தம்பொருமல்
பேதியிரைச் சல்கடுப்பு பேராமம்-ஓதிருமல்
பல்லொடுபல் மூலம் பகமிவைநோ யென்செயுமோ
சொல்லொடுபோம் ஓமமெனச் சொல்

- அகத்தியர் குணவாகடம்

Chemical constituents

- Essential oil
- Thymol
- Caravacrol
- Camphene
- Pinene

Actions

- Stomachic
- Anti-spasmodic
- Antiseptic
- Tonic
- Stimulant

11. ADHIVIDAYAM

Botanical name	-	Aconittum heterophyllum
English name	-	Indian atis root
Family	-	Ranunculaceae

Organoleptic characters

Taste	-	Kaippu
Potency	-	Veppam
Division	-	Kaarppu

General properties

அதிவி டயம்சர்க்க ராற்புதநோய் வெப்பு
கொதிமருவு பேதியொடு கோழை-எதிர்வாந்தி
என்றுரைக்கும் நோய்க்கூட்டம் இல்லா தகற்றி
குன்றை நிகர்முலையாய் கூறு.

- அகத்தியர் குணவாகடம்

Chemical constituents

- Atisine
- Hetisine
- Heterophylline
- Atisenol

Actions

- Stomachic
- Astringent
- Febrifuge
- Tonic
- Anti –periodic

12. VAAL MILAGU

Botanical name	-	Piper cubeba
English name	-	Tailed pepper
Family	-	Piperaceae

Organoleptic characters

Taste	-	Kaarppu
Potency	-	Veppam
Division	-	Kaarppu

General properties

வாதபித்த ஐயம் வயிற்று வலிதாகஞ்
சீதம் பலநோய் சீதையுங்காண்-போத
அதிதீ பனமாம் அணங்கரசே நாளுந்
துதிவால் மிளகருந்தச் சொல்.

- **அகத்தியர் குணவாகடம்**

Chemical constituents

- Sesqirterpenehydrocarbons
- Piperenol
- Zeylenol
- Cyclohexane

Actions

- Stimulant
- Diuretic
- Expectorant
- Carminative

13.VENTHAYAM

Botanical name	-	Trigonella foenum
English name	-	Fenugreek
Family	-	Fabaceae

Organoleptic characters

Potency	-	Thatppam
Division	-	Kaarppu

General properties

பித்தவுதிரம்போகும் பேராக்கணங்களும்போம்
அத்திசுரந் தாகம் அகலுங்காண்-தத்துமதி
வேக இருமலொடு வீறு கயம் தணியும்
போகமுறும் வெந்தயத்தைப் போற்று.

- அகத்தியர் குணவாகடம்

Chemical constituents

- Diosgenin
- Tigogenin
- Neotigogenin
- Vitexin
- Luteolin

Actions

- Refrigerant
- Laxative
- Tonic
- Diuretic
- Emollient

14. SITRARTHAI

Botanical name	-	Alpinia officinarum
English name	-	Galangal the lesser
Family	-	Zingiberaceae

Organoleptic characters

Taste	-	Kaarppu
Potency	-	Veppam
Division	-	Kaarppu

General properties

வாதபித் தங்கரப்பான் வாதஞ் சிரோரோகஞ்
சேர்ந்தகப முத்தோடஞ் சீதமொடு-நேர்ந்தசுரம்
மற்றரத்தைக் காட்டி வருமிருமலுந்தீரும்
சிற்றரத்தை வன்மருந்தால் தேர்

- அகத்தியர் குணவாகடம்

Chemical constituents

- Essential oil
- Limonene
- Cineol
- Linalool
- Cedrol
- Eugenol

Actions

- Expectorant
- Febrifuge
- Stomachic

15. AKKARAKARAM

Botanical name	-	Anacyclus pyrethrum
English name	-	Pellitory of spain
Family	-	Asteraceae

Organoleptic characters

Taste	-	Kaarppu
Potency	-	Veppam
Division	-	Kaarppu

General properties

அக்கர காரம் அதன்பேர் உரைத்தக்கால்
உக்கிரகால் அத்தோடம் ஓடுங்காண்-முக்கியமாய்
கொண்டால் சலம் ஊறும் கொம்பனையே தாகசுரம்
கண்டால் பயந்தோடுங் காண்

- அகத்தியர் குணவாகடம்

Chemical constituents

- Volatile oil
- Anacyclin
- Pellitorine
- Pyrethrin

Actions

- Stimulant
- Sialogogue

16.THIPPLI

Botanical name	-	Piper longum
English name	-	Long pepper
Family	-	Piperaceae

Organoleptic characters

Taste	-	Inippu
Potency	-	Thatppam
Division	-	Inippu

General properties

கட்டி யெதிர்நின்று கடுநோயெல் லாம்பணியும்
திட்டி வினையகலும் தேகமெத்த-புட்டியாம்
மாமனுக்கு மாமனென மற்றவர்க்கு மற்றவனாங்
காமமெனுந் திப்பிலிக்கும் கை.

- தேரையர் குணவாகடம்

Chemical constituents

- Caryophyllene
- Piperine
- Sesamine
- Pipernonaline
- Piplasterol

Actions

- Stimulant
- Carminative

17. SAADHIKKAI

Botanical name	-	Myristica fragrans
English name	-	Nut meg
Family	-	Myristicaceae

Organoleptic characters

Taste	-	Thuvarppu
Potency	-	Veppam
Division	-	Kaarppu

General properties

தாது நட்டம் பேதி சருவாசி யஞ்சிர நோய்
ஓதுசுவா சங்காசம் உட்கிரணி- வேதோ
டிலக்காய் வரும்பிணிபோம் ஏற்றமயல் பித்தங்
குலக்காய் யருந்துவர்க்குக் கூறு

- **தேரையர் குணவாகடம்**

Chemical constituents

- Dimeric phenylpropanoids
- Myricetin
- Essential oil
- Fixed oil

Actions

- Stimulant
- Aromatic
- Tonic
- Aphrodisiac

18. SAATHIPATHIRI

Botanical name	-	Myristica fragrans
English name	-	Arillus of the nut
Family	-	Myristicaceae

Organoleptic characters

Taste	-	Kaarppu,Thuvarppu
Potency	-	Veppam
Division	-	Kaarppu

General properties

சாதிதரும் பத்திரிக்குத் தாபச் சுரந்தணியும்
ஓதுகின்ற பித்தம் உயருங்காண் -தாதுவிர்த்தி
யுண்டாங் கிரகணியோ டோதக் கழிச்சலறும்
பண்டாங் குறையே பகர்.

- அகத்தியர் குணவாகடம்

Chemical constituents

- Eugenol
- Sabinene
- Myristicin
- Elemicine

Actions

- Carminative
- Aphrodisiac
- Stimulant
- Hypnotic

19. KIRRAMBU

Botanical name - Syzygium aromaticum
English name - Cloves
Family - Myrtaceae

Organoleptic characters

Taste - Kaarppu
Potency - Veppam
Division - Kaarppu

General properties

பித்த மயக்கம் பேதியோடு வாந்தியும் போம்
சுத்தவிரத் தக்கடுப்புந் தோன்றுமோ-மெத்த
இலவங்கங் கொண்டவருக் கேற் சுகமாகும்
மலமங்கே கட்டு மென வாழ்த்து

- அகத்தியர் குணவாகடம்

Chemical constituents

- Caryophyllene oxide
- Eugenol acetate
- Methyl palmitate
- Eugenine
- Acetophenone
- Proppyl benzoate

Actions

- Anti-spasmodic
- Carminative
- Stomachic

20. KARUNCHEERAGAM

Botanical name	-	Nigella sativa
English name	-	Black cumin
Family	-	Ranunculaeae

Organoleptic characters

Taste	-	Kaippu
Potency	-	Veppam
Division	-	Kaarppu

General properties

கருஞ்சீர ரகத்தான் கரப்பனொடு புண்ணும்
வருஞ்சிராய்ப் பீநசமு மாற்றும்-அருந்தினால்
காய்ச்சல் தலைவலியுங் கண்வலியும் போமுலகில்
வாய்ச்ச மருந்தெனவே வை

- தேரையர் குணவாகடம்

Chemical constituents

- Nigellinine
- N-oxide
- Nigellicine
- N-oxide
- Fatty acids

Actions

- Diuretic
- Stomachic
- Emollient
- Anthelmintic
- Parasiticide

21. SEERAGAM

Botanical name	-	Cuminum cyminum
English name	-	Cumin seeds
Family	-	Apiaceae

Organoleptic characters

Taste	-	Kaarppu,Inippu
Potency	-	Thatpam
Division	-	Inippu

General properties

பித்தமெனு மந்தரியைப் பின்னப் படுத்தியவன்
சத்துருவை யுந்துறந்து சாதித்து-மத்தனெனும்
ராசனையு மீவென்று நண்பனைப் பலபடுத்தி
போசனகு டோரிசெயும் போர்

- தேரையர் குணவாகடம்

Chemical constituents

- Cuminin
- Terpinene
- 3, 5-Dihydroxy flavone
- Luteoline
- Apigenin

Actions

- Anti-spasmodic
- Astringent
- Anthelmintic
- Carminative

22. CHUKKU

Botanical name	-	Zingiber officinale
English name	-	Dried ginger
Family	-	Zingiberaceae

Organoleptic characters

Taste	-	Kaarppu
Potency	-	Veppam
Division	-	Kaarppu

General properties

சூலைமந்தம் நெஞ்செரிப்பு தோடமேப் பம்மழலை
மூலம் இரைப்பிருமல் மூக்குநீர்-வால கப
தோடமதி சாரந் தொடர்வாத குன்மநீர்த்
தோடம்ஆ மம்போக்குஞ் சுக்கு.

- தேரையர் குணவாகடம்

Chemical constituents

- Gingerols
- Dihydrogingerol
- Gingerdione
- Hexaahydrocurcumin

Actions

- Anti-emetic
- Anti-spasmodic
- Anti-inflammatory
- Antiperiodic
- Carminative
- Antiperiodic

23. MILAGU

Botanical name	-	Piper nigrum
English name	-	Black pepper
Family	-	Piperaceae

Organoleptic characters

Taste	-	Kaippu,Kaarppu
Potency	-	Veppam
Division	-	Kaarppu

General properties

சீதசுரம் பாண்டு சிலேத்மங் கிராணிகுன்மம்
வாதம் அருசிபித்தம் மாமூலம்-ஓதுசன்னி
யாசமபஸ் மாரம் அடன்மேகம் காசமிவை
நாசங் கறிமிளகினால்

- அகத்தியர் குணவாகடம்

Chemical constituents

- Chavicine
- Piperidine
- Isochavinic acid
- Methyl caffeic acid

Actions

- Acrid
- Carminative
- Antiperiodic
- Resolvent
- Stimulant
- Antidote

24.SUGAR

Botanical Name	-	Saccharum officinarum. Linn
English Name	-	Sugar cane
Family	-	Poaceae

Organoleptic character

Taste	-	Sweet
Potency	-	Coolent
Division	-	Sweet

General properties:

சீனிச் சர்க்கரைக்குத் தீராத வன்சுரமுங்
கூனிக்கும் வாதத்தின் கூட்டுறவும் -ஏனிருக்கும்
வாந்தி யொடுகிருமி மாறாத விக்கலுமே
போந்திசையை விட்டுப் புரண்டு.

- அகத்தியர் குணவாகடம்

Actions:

- Antiseptic
- Demulcent

EXTERNAL MEDICINE: *SANGAM VER THYLAM*

1. SANGAMKUPPI VER

Botanical name	-	Azima tetracantha
English name	-	Salvadoraceae
Family	-	Misletoberry thorn

Organoleptic characters

Taste	-	Kaippu
Potency	-	Veppam
Division	-	Kaarppu

General properties

வீக்கம் கரப்பான் விதாகம் கிரந்திகுன்மம்
ஊக்கமிகு சூலைவாய் வோடுபித்தத்-தாக்குவிடம்
வீறுமோ கண்துலங்கும் வீசுபசி ரத்தமுண்டாம்
கூறுசங்கம் வேரிலை கட்கு.

- அகத்தியர் குணவாகடம்

Chemical constituents

- Azimine
- Azcarpine
- Carpine
- High cone of N-methyl glucosinolate
- Neoascorbigen
- High concentration of N-methoxy -3-indolylmethyl-glucosinolate

Actions

- Diuretic
- Antiperiodic
- Tonic
- Expectorant
- Stimulant

2. MILAGU

Botanical name	-	Piper nigrum
English name	-	Black pepper
Family	-	Piperaceae

Organoleptic characters

Taste	-	Kaippu,Kaarppu
Potency	-	Veppam
Division	-	Kaarppu

General properties

சீதசுரம் பாண்டு சிலேத்மங் கிராணிகுன்மம்
வாதம் அருசிபித்தம் மாமூலம்-ஓதுசன்னி
யாசமபஸ் மாரம் அடன்மேகம் காசமிவை
நாசங் கறிமிளகினால்

- **அகத்தியர் குணவாகடம்**

Chemical constituents

- Chavicine
- Piperidine
- Isochavinic acid
- Methyl caffeic acid

Actions

- Acrid
- Carminative
- Antiperiodic
- Resolvent
- Stimulant

3. KARUNCHEERAGAM

Botanical name	-	Nigella sativa
English name	-	Black cumin
Family	-	Ranunculaeae

Organoleptic characters

Taste	-	Kaippu
Potency	-	Veppam
Division	-	Kaarppu

General properties

கருஞ்சீர ரகத்தான் கரப்பனொடு புண்ணும்
வருஞ்சிராய்ப் பீநசமு மாற்றும்-அருந்தினால்
காய்ச்சல் தலைவலியுங் கண்வலியும் போமுலகில்
வாய்ச்ச மருந்தெனவே வை

- அகத்தியர் குணவாகடம்

Chemical constituents

- Nigellinine
- N-oxide
- Nigellicine
- N-oxide
- Fatty acids

Actions

- Diuretic
- Stomachic
- Emollient
- Anthelmintic
- Parasiticide

4. MAASIKKAI

Botanical name	-	Quercus infectoria
English name	-	Oak galls
Family	-	Fagaceae

Organoleptic characters

Taste	-	Thuvarppu
Potency	-	Thatppam
Division	-	Kaarppu

General properties

அக்கரங்கள் போக்கிவிடும் மாறாத வெப்பகற்றும்
மெய்க்குறுதி மாசிக்காய் மென்மேலும்-தக்கதொரு
பாலர்கண நோய்போக்கும் பன்மேக முந்தொலைக்கும்
வேலனைய கண்ணாய் விளம்பு

- அகத்தியர் குணவாகடம்

Chemical constituents

- Tanic acid
- β-Sitosterol
- Amentoflavone
- Hexamethyl ether
- Methyl olenate

Actions

- Astringent
- Styptic
- Tonic

5. EALAM

Botanical name	-	Electtaria cardamomum
English name	-	Lesser cardamom
Family	-	Zingiberaceae

Organoleptic characters

Taste	-	Kaarppu
Potency	-	Veppam
Division	-	Karppu

General properties

தொண்டை வாய்கவுள் தாலுகு தங்களில்
தோன்றும் நோயதி சாரம்பன் மேகத்தால்
உண்டை போல்எழுங் கட்டி கிரிச்சரம்
உழலை வாந்தி சிலந்தி விஷஞ்சுரம்
பண்டை வெக்கை விதாகநோய் காசமும்
பாழுஞ் சோமப் பிணிவிந்து நட்டமும்

அண்டை யீளைவன் பித்தம் இவைக்கெல்லாம்
ஆல மாங்கமழ் ஏல மருந்ததே

Chemical constituents

- Alpha-terpinyl acetate
- Limonene
- Terpinolene
- Linalyl acetate
- myrcene

Actions

- Stimulant
- Carminative
- Stomachic

6. NALLENNAI (GINGELLY OIL)

ELLU

Botanical name	-	Sesamum indicum
English name	-	Sesame
Family	-	Pedaliaceae

Organoleptic characters

Taste	-	Inippu
Potency	-	Veppam
Division	-	Inippu

General properties

எள்ளுமருந் தைக்கெடுக்கும் எறனலாந் திண்மைதரும்
உள்ளிலையைச் சேர்க்கும் உதிரத்தைத்-தள்ளுமிரு
கண்ணுக் கொளிகொடுக்குங் காசமுண்டாம் பித்தமுமாம்
பண்ணுக் கிடர்புரியும் பார்

- அகத்தியர் குணவாகடம்

Chemical constituents

- Sesamolin
- Seasangolin

- Seasamolinal
- Seasomol
- r-tocopherol

Actions

- Diuretic
- Laxitive
- Lactogogue
- Tonic

PASUMPAAL (COW'S MILK)

GENERAL PROPERTIES:

பாலர்கிழவர் பழஞ்சுரதோர் புண்ணாளி
சூலையர் மேகத்தோர் துர்பலத்தோர் ஏலுமிவர்
எல்லார்க்கு மாகும் ளைத்தவர்க்குக்ஞ் சாதகமாய்
நல்லாய் பசுவின்பால் நாட்டு.

It is a good nutritive supplement for new born, young adults and older adults. It cures vatha diseases, veneral diseases, and also useful in the treatment of emaciated individuals.

Other aspects about milk

Milk is a translucent white liquid produced by the mammals, a pH ranging from 6.4 to 6.8, making it slightly acidic. Cow's milk is the primary source of nutrition for young mammals before they are able to digest other types of food. Cow's milk contains proteins, peptides, Vitamins, phospholipids and fatty acids.

Nuttrients in milk

Biotin
Pantothenic acid
Iodine
Selenium
Thaiamine
Vitamin D

MATERIALS AND METHODS

AN OPEN CLINICAL TRIAL OF SIDDHA DRUGS *"PARANGIPATTAI CHOORANAM"* (INTERNAL) AND *"SANGAMVER THYLAM"* (EXTERNAL) IN THE TREATMENT OF *"KAALANJAGA PADAI"* (PSORIASIS)

STUDY DESIGN:

STUDY TYPE	:	An open clinical trail
STUDY PLACE	:	Ayothidoss Pandithar Hospital, National Institute of Siddha, Tambaram Sanatorium, Chennai - 47.
STUDY PERIOD	:	12 Months
SAMPLE SIZE	:	40 patients (20 Patients in OPD and 20 Patients in IP)

STANDARD OPERATING PROCEDURE:

SOURCE OF RAW DRUGS:

The required raw drugs for the trial medicines were purchased from a well reputed raw drug shop and the raw drugs were authenticated. After that the raw drugs were purified as per siddha literatures authority by Medicinal Botany , and then the trial drugs were prepared in the *Gunapadam* laboratory of National Institute of Siddha by following Standard operating Procedures.

Preparation of trial drugs: Internal medicine *-Parangipattai chooranam*

Ingredients:

Parangi pattai (*Smilax china*) - 175 grams (*5 Palam)*

Ammukkara ver (*Withania somnifera*)

Sangam kuppi ver (*Azima tetracantha*)

Siru pirappan kizhangu (*Calamus rotang*)

Kondrai pattai (*Cassia fistula*) -35grams *(1 Palam)*

Saaranai ver (*Trianthema decandra*)

Kodiveli ver (*Plumbago zeylanica*)

Adhimadhuram (*Glycyrrhiza glabra*)

Koththa malli (*Coriandrum sativum*)

Omam (*Trachyspermum ammi*)

Adhividaiyam (*Aconitum heterophyllum)*

Vaal milagu (*Piper cubeba*)

Vendhayam (*Trigonella foenum-graecum*)

Sitraraththai (*Alpinia officinarum*)

Akkara kaaram (*Anacyclus pyrethrum*)

Thippili (*Piper longum)* 15.3grams *(3 Kazhanju*)

Saadhikkai (*Myristica fragrans*)

Saadhipathiri (*Myristica fragrans)*

Kiraambu (*Syzygium aromaticum*)

Karuncheeragam (*Nigella sativa*)

Seeragam(Cuminum cyminum)

Chukku (*Zingiber officinalae*)

Milagu (*Piper nigrum*)

Paal (Milk) - 5.3 lit *(4 Padi)*

Sarkarai (Sugar) - An half the amount of *chooranam*.

METHOD OF PURIFICATION OF RAW DRUGS:

Parangipattai (*Smilax china*)

Clean it with white cloth then peel of the outer layer of Parangi pattai root bark.(Ref:sigicha rathina theebam:28)

Chitiramoolam ver (*Plumbago zeylanica*)

Remove the inner nerve of the root and powder the outer part of root. Take a pot with milk and its mouth is covered with white cloth then the powder over it and closed it with another vessel.Gently heat it for 3 hours then dry and grind (Ref:sigicha rathina theepam :29)

Amukkara ver (Withania somnifera)

Take a pot with milk and its mouth is covered with white cloth then the powder over it and closed it with another vessel.Gently heat it for 3 hours then dry and grind (Ref:sigicha rathina theepam :29)

Sangam kuppi ver (*Azima tetracantha*)

Take a pot with milk and its mouth is covered with white cloth then the powder over it and closed it with another vessel.Gently heat it for 3 hours then dry and grind (Ref:sigicha rathina theepam :29)

Saaranai ver (*Trianthema decandra*)

Take a pot with milk and its mouth is covered with white cloth then the powder over it and closed it with another vessel.Gently heat it for 3 hours then dry and grind (Ref:sigicha rathina theepam :29)

Siru pirappan kizhangu (*Calamus rotang*)

Clean it with white cloth then peel of the outer layer .(Ref:sigicha rathina theebam:28)

Kondrai pattai (*Cassia fistula*)

Clean it with white cloth then peel of the outer layer .(Ref:sigicha rathina theebam:28)

Saadhipathiri (*Myristica fragrans)*

Remove the dust particle and dried. . (Ref:sigicha rathina theepam :29)

Kiraambu (*Syzygium aromaticum*)

Remove the dust particle and dried . (Ref:sigicha rathina theepam :29)

Adhimadhuram (*Glycyrrhiza glabra*)

Clean with water ,peel of the outer layer. (Ref:sigicha rathina theepam :30)

Millagu *(Piper nigrum)*

Soak in the buttermilk for three hours then dried and powdered (Ref: Sigicha Rathina Theepam :28)

Vaal milagu (*Piper cubeba*)

Soak in the buttermilk for three hours then dried and powdered (Ref: Sigicha Rathina Theepam :28)

Karuncheeragam (*Nigella sativa*)

Dried for six hours and powdered. (ref: sarakku sudhi sei muraigal :6)

Seeragam(Cuminum cyminum)

Dried for six hours and powdered. (ref: sarakku sudhi sei muraigal :6)

Thippili (*Piper longum)*

Soak in the lemon juice then dried and powdered (Ref: Sigicha Rathina Theepam :29)

Koththa malli (*Coriandrum sativum*)

Soak in the lemon juice then dried and powdered (Ref: Sigicha Rathina Theepam :29)

Chukku (*Zingiber officinalae*)

Soak in the diluted sodium carbonate water then dried and powdered (ref: sarakku sudhi sei muraigal :6

Omam (*Trachyspermum ammi*)

Soak in the diluted sodium carbonate water then dried and powdered (ref: sarakku sudhi sei muraigal :6

Vendhayam (*Trigonella foenum-graecum*)

Soak in the vinegar then dried and powdered (Ref: Sigicha Rathina Theepam :29)

Akkara kaaram (*Anacyclus pyrethrum*)

Remove the dust particle and dried . (Ref:sigicha rathina theepam :29)

Sitraraththai (*Alpinia officinarum*)

Remove the dust particle and dried . (Ref:sigicha rathina theepam :29)

Adhividaiyam (*Aconitum heterophyllum)*

Remove the dust particle and dried . (Ref:sigicha rathina theepam :29)

METHOD OF PREPERATION:

The above mentioned first seven ingredients are dried, and make it into the fine powder. Take required quantity of milk in pot, the top of the pot covered with cloth. The fine powdered placed over the cloth and it closed by another pot. Allowed to boil the milk. Then the fine powder mixed with the remaining part of powdered ingredients. Finally add sugar which is half the amount of powder. Then the medicine stored in an air tight container.

EXTERNAL MEDICINE: *SANGAMVER THYLAM*

Ingredients:

Sangam kuppi ver (*Azima tetracantha*)	- 875 grams (1/4 Thulaam)
Milagu (*Piper nigrum*)	
Karuncheeragam (*Nigella sativa*)	
Maasikkai (*Quercus infectoria*)	- 35 grams (1 Palam)
Ealam (*Elettaria cardamonum*)	
Neer (Water)	- 21.5 lit (1 Dhuni)
Nallennai (Gingelly oil)	- 1.34 lit (2 Padi)
Paal (Milk)	- As per requirement

METHOD OF PREPARATION:

First prepare decoction of *Sangam ver*. Grind other drugs with the use of milk and make it into *karkam*. Then the *karkam* mixed with *Sangamver* decoction and added oil. Then boiled till it attained the suitable consistency and filter it.

DRUG STORAGE:

The trial drug ***Parangipattai chooranam*** is stored in clean and dry container. ***Sangamver Thylam*** is stored in clean and dry narrow mouthed bottles.

DISPENSING:

The *Chooranam* is given in packets and oil is given in bottle

INGREDIENTS OF THE INTERNAL MEDICINE:

PARANGIPATTAI CHOORANAM

1. PARRANGI PATTAI

2.AMUKKARA VER

3. SIRUPIRAPAN KIZHANGU

4.SANGAMVER

5.KONDRAIPATTAI

6. SAARANAI VER

7.KODIVELI VER

8. ATHIMATHURAM

]

9. KOTHAMALLI

10.OMAM

11.ATHIVIDAYAM

12. VAAL MILAGU

13. VENTHAYAM

14.SIRRARATHAI

15. AKKARAGARAM

16. THIPPLI

17. SAATHIKKAI

18.SAATHIPATHIRI

19. KIRAMBU

20.SEERAGAM

21. KARUNCHEERAGAM

22. SUKKU

23. MILAGU

24. SARKKARAI

INGREDIENTS OF EXTERNAL MEDICINE

SANGAM VER THYLAM

1.SANGAM VER

2. MILAGU

3. KARUNCHEERAGAM

4. ELAM

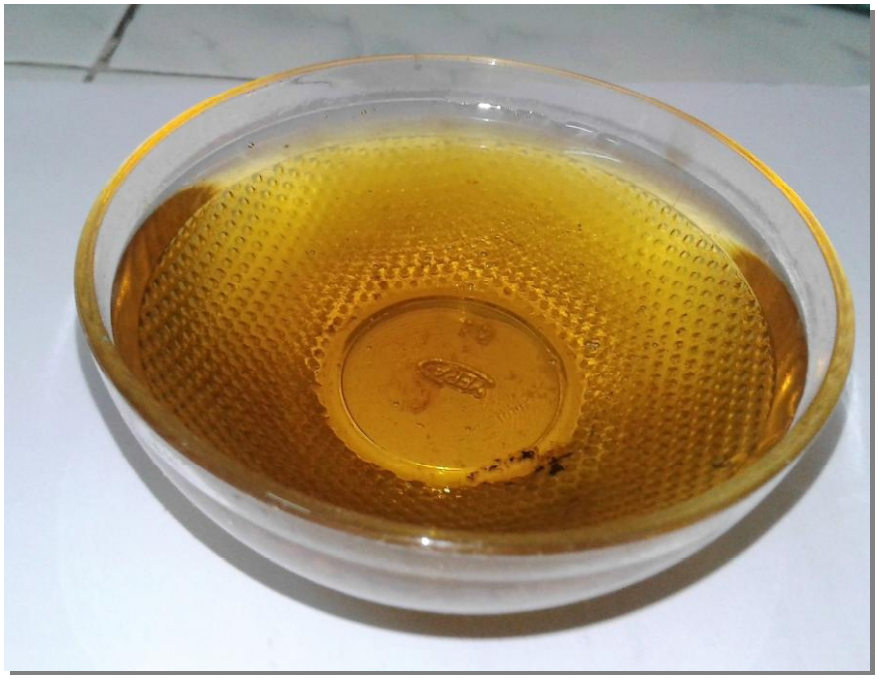
5. MAASIKKAI

6. NALLENNAI

7. MILK

INTERNAL MEDICINE - PARANGIPATTAI CHOORANAM

SANGAMVER THYLAM -EXTERNAL MEDICINE



SUBJECT SELECTION:

Patients reporting with symptoms of inclusion criteria were subjected to screening test and documentation.

INCLUSION CRITERIA

- Age : 16-60 years
- Sex : Both male and female
- Patients having the following signs and symptoms
    1. Erythema
    2. Thickness
    3. Scaling
    4. with or without itching
    5. Auspitz sign +
    6. Candle crease sign +
- Willing to participate in trial and signing consent by fulfilling the condition of proforma.
- Willing to give specimen of blood for the investigation to start and end of the treatment and willing to take photograph before and after treatment.

EXCLUSION CRITERIA

- Insulin Dependent Diabetes Mellitus
- Pregnancy and lactation
- Psoriasis with evidence of any other skin disease
- Psoriatic arthropathy
- Cardiac diseases
- Hansen's disease
- Evidences of secondary infection in the lesions.
- Any other chronic illness

WITHDRAWAL CRITERIA

- Intolerance to the drug and development of any serious adverse effect during drug trial.
- Poor patient compliance & defaulters
- Patient unwilling to continue the course of clinical Study.
- Occurrence of any other systemic illness

TESTS AND ASSESMENTS:

1. Clinical assessment
2. Siddha system assessment
3. Routine investigations

1. CLINICAL ASSESMENT:

- Erythema
- Thickness
- Macules
- Papules
- Plaques
- Itching
- Coin –shaped lesion
- Scaling
- Candle –grease sign
- Auspitz sign
- Koebner's phenomenon

2. INVESTIGATIONS BASED ON SIDDHA SYSTEM:

1. Naadi
2. Sparisam
3. Naa
4. Niram
5. Mozhi
6. Vizhi
7. Malam
8. Moothiram

I) Neerkkuri

II) Neikkuri

3. INVESTIGATION

BLOOD

- Hb
- Total WBC Count

- DC
    - Polymorphs
    - Lymphocytes
    - Eosinophils
    - Monocytes
    - Basophils

- Total RBC count
- ESR (½ /1 Hr)
- Blood sugar (F &PP)
- Serum cholesterol

URINE

- Albumin
- Sugar(F & PP)
- Deposits

RENAL FUNCTION TESTS

Blood Urea

Serum Creatinine

Uric acid

LIVER FUNCTION TESTS

Serum total bilirubin

Direct bilirubin

Indirect bilirubin

Serum Alkaline phosphatises

SGOT & SGPT

DATA COLLECTION:

Required information was collected from each patient by using the following forms:

FORMS:

FORM I	Screening and selection Proforma
FORM II	Clinical assessment Proforma
FORM III	Laboratory investigation Proforma

FORM IV	Drug compliance form
FORM V	Patient information sheet
FORM VI	Consent form
FORM VII	Withdrawal form / Pharmacovigilance
FORM VIII	Dietary Advice form
FORM IX	Adverse reaction form

STUDY ENROLLMENT:

- Patients reporting at the OPD with clinical feature of erythematous patches, scaling, itching were chosen for enrolment based on the inclusion and exclusion criteria.
- The enrolled patients were informed about the study, trial drug, possible outcomes and the objectives of the study in the language and terms understandable to them and getting consent in the Informed Consent form (Form VI).
- Complete clinical history, complaints and duration, examination findings-- all were recorded in the prescribed Proformas.
- Screening Form- I was filled up, Form –II and Form –III for recorded the patients, history, clinical examination of symptoms and signs and laboratory investigations respectively. If there is any abnormal laboratory reports obtained then excluded from this study. Patients were advised to take the trial drug and appropriate dietary advice (Form VIII) was given according to the patients, perfect understanding.

CONDUCT OF THE STUDY:

On The First Day of the treatment Purgation was given with Meganatha kuligai -2 tablets with hot water in the early morning for balancing the vital humours. Then the trial drugs "***Parangipattai chooranam***" (internal) and "**Sangamver Thylam**" (External) were given for 48 days.

Among the 40 patients were treated with trial medicines only. If there is a need of IPD to the patients were admitted in ward for the clinical assessment.

OPD patients are requested to visit the hospital once in 7 days. In each and every visit clinical assessment and prognosis was recorded. In IPD patients the clinical assessment and prognosis was recorded daily. This was monitored by the Faculty and HOD of the Department of Sirappu Maruthuvam.

Laboratory investigations were done before and after the treatment. For IPD patients, who were not in a position to stay in the hospital for a long time, they were advised to attend the OPD for further follow-up. At the end of the trial, the patients were advised to visit the OPD for further 6 months for follow-up for any recurrence. Defaulters were not be allowed to continue and withdrawn from the study with fresh

DATA ANALYSIS:

After enrolling the patients in the study, a separate file for each patient was maintained and all forms kept in the file. Study No. and patient's No. was entered on the top of the file for easy identification. Whenever the patients visit OPD during the study period, necessary entries were made at the assessment forms. The screening forms were filled separately. Forms would be further scrutinized by Senior Research Officer (Statistics) for logical errors and incompleteness of data to avoid any bias. No modification in the results is permitted for unbiased reports.

ADVERSE/SERIOUS EFFECTS MANAGEMENT

In this study, no adverse events were observed during the course of treatment.

OUTCOME

Good outcome – Clearence of lesions and 75% reduction in the PASI Score in before and after treatment.

Moderate outcome – Clearence of lesions and 50% reduction in the PASI Score in before and after treatment.

Mild outcome – Slight clearance of lesions and 25% reduction in the PASI Score in before and after the treatment.

Nil outcome – No clearance of lesions or No reduction of PASI Score.

Psoriasis Area and Severity Index (PASI)

A Psoriasis Area and Severity Index (PASI) is a quantitative rating scale for measuring the severity of psoriatic lesions based on area coverage and plaque appearance

Erythema/ Thickness/Scaling-Rating score	Area Scoring
0 - None	0-Nil
1- Slight	1-1%-9%
2- Moderate	2- 10%-29%
3-Severe	3-30%-49%
4-Very severe	4-50%-69%
	5-70%-89%
	6-90%-100%

PASI Calculation					
Patient name					
Date					
Plaque Characteristic	Rating Score	Body region and weighting factor			
		Head	Upper Limbs	Trunk	Lower Limbs
Erythema	0 = None				
Thickness	1 = Slight				
	2 = Moderate				
Scaling	3 = Severe				
	4 = Very Severe				
Totals		A1=	A2=	A3=	A4=
Weighting Factor		A1x0.1=B1	A2x0.2=B2	A3x0.3=B3	A4x0.4=B4
Surface area totals		B1=	B2=	B3=	B4=
Degree of involvement as % for each body region affected (score each region between 0 and 6)	0 = None				
	1 = 1-9%				
	2 = 10-29%				
	3 = 30-49%				
	4 = 50-69%				
	5 = 70-89%				
	6 = 90-100%				
Surface area totals x % involvement totalsSum Scores above =		B1xscore=C1	B2xscore=C2	B3xscore=C3	B4xscore=C4

- Add together each of Erythema/ Thickness/Scaling scores for each of the body regions to give 4 separate sub totals A1, A2, A3 and A4

- Multiply each subtotal by amount of body surface area represented by that region i.e. A1 x 0.1 for head, A2 x 0.2 for upper limbs, A3 x 0.3 for trunk, A4 x 0.4 for lower limbs to give a value B1, B2, B3 and B4 for each body region respectively.

A1 x 0.1=B1; A2 x 0.2=B2; A3 x0.3=B3; A4 x 0.4=B4

- For each body region multiply subtotal B1, B2, B3 and B4 by the score(0-6) of the % of body region involved to give 4 sub totals C1, C2, C3 and C4
- The patient's PASI score is the sum of C1+C2+C3+C4

Results:

Good - Clearance of lesions and Reduction of PASI Score from 3, 4 to 1, 0

Moderate - Partial clearance of lesions and Reduction of PASI Score from 3, 4 to 2.

Mild - Slight clearance of lesions and Reduction of PASI Score from 4 to 3

Nil - NO Clearance of lesions or No reduction PASI Score

Secondary Outcome:

- Occurrence of types of lesions related to Aetiological factors.

ETHICAL ISSUES:

- The trial drug was mentioned in the List of books mentioned in the Drugs and Cosmetics Act 1940. Hence no preclinical and toxicity studies would be carried out.
- The patient would be informed about the treatment and other procedures in his vernacular language. After getting the consent only (language understandable to the patient) they were enrolled in the study.
- To prevent any infection, while collecting blood sample from the patient, only disposable syringes, disposable gloves, with proper sterilization of lab equipment's were used.
- The data collected from the patient would be kept confidential.
- Treatment would be provided free of cost.
- In any adverse reaction observed during the trial the patients would be given alternative treatment at National Institute of Siddha for further management case being inducted.

BIO-CHEMICAL AND ELEMENTAL ANALYSIS

Qualitative Analysis

SL.NO	EXPERIMENT	OBSERVATION	INFERENCE
1.	Appearance of the sample	Lighter Brown in Colour	
2.	**Solubility:** a. A little of the sample is shaken well with distilled water. b. A little of the sample is Shaken well with con. Hcl Con. H_2SO_4.	Completely soluble Completely soluble	 Absence of Silicate
3.	**Action of Heat:** A small amount of the sample is taken in a dry test tube and heated gently at first and then Strong.	White fumes evolved Brown fumes not evolved	Presence of Carbonate. Absence of Nitrate.
4.	**Flame Test:** A small amount of the sample is made into a paste with con. Hcl in a watch glass and introduced into non-luminous part of the Bunsen flame.	White flame is appeared	Absence of Copper.
5	**Ash Test:** A filter paper is soaked into a mixture of sample and cobalt nitrate solution and introduced into the Bunsen flame and ignited.	No Yellow colour flame.	Absence of Sodium.

Preparation of the Extract

5gm of *Parangopattai chooranam* was weighed accurately and placed in a 250 ml clean beaker. Then 50 ml distilled water was added and dissolved well. Then it is boiled well for about 10 minutes. It was cooled and filtered in a 100 ml volumetric flask and then it was made up to 100 ml with distilled water. This fluid was taken for analysis.

SL. NO.	EXPERIMENT	OBSERVATION	INFERENCE
TEST FOR ACID RADICALS			
1.	**Test For Sulphate:** a. 2 ml of the above prepared extract is taken in a test tube to this added 2ml of 4% ammonium oxalate solution. b. 2ml of the above prepared extract is added with 2 ml of dil-Hcl is added until the effervescence ceases off. Then 2ml of Barium chloride solution is added.	Cloudy appearance present A white precipitate insoluble in con. Hcl is obtained	Presence of Sulphate Sulphate is Confirmed.
2.	**Test For Chloride:** 2 ml of the above prepared Extract is added with dil. HNO_3 till the effervescence ceases. Then 2 ml of silver nitrate solution is added.	Cloudy appearance present (Mild trace element)	Presence of Chloride
3.	**Test For Phosphate:** 2 ml of the extract is treated with 2ml of ammonium molybdate solution and 2 ml of con. HNO_3	Cloudy yellow appearance Present	Presence of Phosphate
4.	**Test For Carbonate:** 2m1 of the extract is treated with 2m1 magnesium sulphate solution	cloudy appearance	Presence of Carbonate

5	**Test For Nitrate:** 1gm of the substance is heated with copper turnings and concentrated H_2SO_4 and viewed the test tube vertically down.	Brown gas is not evolved	Absence of Nitrate
6.	**Test For Sulphide:** 1 gm of the substance is treated with 2m1 of con. Hcl.	No Rotten egg Smelling gas evolved	Absence of Sulphide.
7.	**Test for fluoride & oxalate** 2 m1 of The Extract Is Added With 2m1of Acetic Acid and 2 m1 calcium Chloride solution and heated.	No Cloudy appearance.	Absence of Fluoride & Oxalate
8.	**Test for Nitrite:** 3drops of extract is placed on a filter paper,on that 2 drops of acetic Acid and 2 drops of benzidine solution is placed.	No characteristic Changes.	Absence of nitrite.
9.	**Test For Borate:** 2 pinches of the substance is made into paste by using sulphuric acid and alcohol (95%) and introduced into the blue flame.	Bluish green colour flame not appeared	Absence of borate.

II. TEST FOR BASIC RADICALS			
1	**Test For Lead:** 2 m1of the extract is added with 2m1of potassium iodide solution.	No Yellow precipitate is obtained	Absence of Lead.
2.	**Test for Copper:** a. One pinch of substance is made into paste with con. Hcl in a watch glass and introduced into the non-luminous part of the flame. b. 2 ml of extract is added with excess of ammonia solution.	No Blue colour flame precipitate No Blue colour precipitate	Absence of Copper. Absence of Copper.
3.	**Test For Aluminium:** Take the 2m1of the extract sodium hydroxide is added in drops to excess.	No characteristic changes	Absence of Aluminium.
4.	**Test For Iron: (Ferrous)** To the 2 ml of extract 2m1 ammonium thiocyanate solution and 2m1of con.HNO_3 is added.	Blood red colour Appeared	Presence of Iron
5.	**Test For Zinc:** To 2m1 of the extract sodium hydroxide solution is added in drops to excess.	White precipitate is not Formed	Absence of Zinc.
6.	**Test For Calcium:** 2m1 of the extract is added with 2m1 of 4% ammonium oxalate Solution.	Cloudy appearance and white precipitate is obtained	Presence of Calcium.

7.	**Test For Magnesium:** To 2ml of extract sodium hydroxide solution is added in drops to excess.	White precipitate is not obtained.	Absence of Magnesium.
8.	**Test For Ammonium:** To 2ml of extract few ml of Nessler's reagent and excess of sodium hydroxide solution are added.	No brown colour appeared.	Absence of Ammonium.
9.	**Test For Potassium:** A pinch of substance is treated with 2ml of sodium nitrite solution and then treated with 2m1 of cobalt nitrate in 30% glacial acetic acid.	Yellowish precipitate is obtained	Presence of Potassium.
10.	**Test For Sodium:** 2 pinches of the substance is made into paste by using HCL and introduced into the blue flame of Bunsen burner.	No Yellow colour Flame appeared.	Absence of Sodium.
11.	**Test For Mercury:** 2m1 of the extract is treated with 2ml of sodium hydroxide solution.	Yellow precipitate is not obtained	Absence of Mercury.
12.	**Test For Arsenic:** 2m1 of the extract is treated with 2m1 of sodium hydroxide solution.	No brownish red Precipitate is obtained	Absence of Arsenic.
III. MISCELLANEOUS			
1.	**Test for Starch:** 2ml of extract is treated with weak iodine solution.	Blue colour developed	Presence of Strarch

2.	**Test For Reducing Sugar:** 5. ml of Benedict's qualitative solution is taken in a test tube and allowed to boil for 2 minutes and added 8 to 10 drops of the extract and again boil it for 2 minutes. The colour changes are noted.	Brick red colour developed	Presence of Reducing sugar.
3.	**Test For The Alkaloids:** a. 2m1 of the extract is treated with 2ml of potassium Iodide solution. b. 2m1 of extract is treated with 2ml of picric acid. c. 2m1 of the extract is treated with 2ml of phosphotungstic acid.	Red colour developed Trace Yellow colour developed White precipitate developed	Presence of Alkaloid. Trace of Alkaloid present. Presence of Alkaloid.
4.	**Test for Tannic Acid:** 2ml of extract is treated with 2ml of ferric chloride solution.	Black precipitate is obtained	Presence of Tannic acid.
5.	**Test for Unsaturated Compound:** To the 2ml of extract 2ml of Potassium Permanganate solution is added.	Potassium Permanganate is not decolourised	Absence of Unsaturated Compound
6.	**Test For Amino Acid:** 2 drops of the extract is placed on a filter paper and dried well and 2 ml of biuret reagent is added	No Violet colour developed	Absence of Amino acids.

7.	**Test For type of Compound:** 2ml of the extract is treated with 2 ml of ferric chloride solution.	No Green colour developed No Red colour developed No Violet colour developed No blue colour Developed	Absence of oxy quinole epinephrine and pyro catechol. Anti pyrine, Aliphatic amino acids and Meconic acid are absent. Apomorphine, Salicylate and Resorcinol are absent. Morphine, Phenol cresol and hydro quinone are absent

PRELIMINARY PHYTOCHEMICAL SCREENING
PARANGIPATTAI CHOORANAM

The preliminary phytochemical screening test was carried out for each extracts of ***Parangipattai Chooranam*** as per the standard procedure.

1. Detection of alkaloids:

Extracts were dissolved individually in dilute Hydrochloric acid and filtered.

a) Mayer's Test: Filtrates were treated with Mayer's reagent (Potassium Mercuric Iodide). Formation of a yellow colored precipitate indicates the presence of alkaloids.

b) Wagner's Test: Filtrates were treated with Wagner's reagent (Iodine in Potassium Iodide). Formation of brown/reddish precipitate indicates the presence of alkaloids.

c) Dragendroff's Test: Filtrates were treated with Dragendroff's reagent (solution of Potassium Bismuth Iodide). Formation of red precipitate indicates the presence of alkaloids.

d) Hager's Test: Filtrates were treated with Hager's reagent (saturated picric acid solution). Presence of alkaloids confirmed by the formation of yellow colored precipitate.

2. Detection of carbohydrates:

Extracts were dissolved individually in 5 ml distilled water and filtered. The filtrates were used to test for the presence of carbohydrates.

a) Molisch's Test:

To 2 ml of plant sample extract, two drops of alcoholic solution of α- naphthol are added. The mixture is shaken well and few drops of concentrated sulphuric acid is added slowly along the sides of test tube. A violet ring indicates the presence of carbohydrates.

b) Benedict's Test:

Filtrates were treated with Benedict's reagent and heated gently. Orange red precipitate indicates the presence of reducing sugars.

3. Detection of glycosides:

Extracts were hydrolyzed with dil. HCl, and then subjected to test for glycosides.

a) Modified Borntrager's Test: Extracts were treated with Ferric Chloride solution and immersed in boiling water for about 5 minutes. The mixture was cooled and extracted with equal volumes of benzene. The benzene layer was separated and treated with ammonia solution. Formation of rose-pink color in the ammonical layer indicates the presence of anthranol glycosides.

b) Cardiac glycoside (Keller-Killiani test): Extract was shaken with distilled water (5 mL). To this, glacial acetic acid (2 mL) containing a few drops of ferric chloride was added, followed byH2SO4 (1 mL) along the side of the test tube. The formation of brown ring at the interface gives positive indication for cardiac glycoside and a violet ring may appear below the brown ring

4. Detection of saponins

a) Froth Test: Extracts were diluted with distilled water to 20ml and this was shaken in a graduated cylinder for 15 minutes. Formation of 1 cm layer of foam indicates the presence of saponins.

b) Foam Test: 0.5 gm of extract was shaken with 2 ml of water. If foam produced persists for ten minutes it indicates the presence of saponins.

5. Detection of phytosterols

a) Salkowski's Test: Extracts were treated with chloroform and filtered. The filtrates were treated with few drops of Conc. Sulphuric acid, shaken and allowed to stand. Appearance of golden yellow color indicates the presence of triterpenes.

6. Detection of phenols Ferric Chloride Test:

Extracts were treated with 3-4 drops of ferric chloride solution. Formation of bluish black color indicates the presence of phenols.

7. Detection of tannins Gelatin Test:

The extract is dissolved in 5 ml of distilled water and 2 ml of 1% solution of Gelatin containing 10% NaCl is added to it. White precipitate indicates the presence of phenolic compounds.

8. Detection of Flavonoids

a) Alkaline Reagent Test: Extracts were treated with few drops of sodium hydroxide solution. Formation of intense yellow color, which becomes colorless on addition of dilute acid, indicates the presence of flavonoids.

b) Lead acetate Test: Extracts were treated with few drops of lead acetate solution. Formation of yellow color precipitate indicates the presence of flavonoids.

9. Detection of proteins and aminoacids

a) Xanthoproteic Test: The extracts were treated with few drops of conc. Nitric acid. Formation of yellow color indicates the presence of proteins.

b) Ninhydrin Test: To the extract, 0.25% w/v ninhydrin reagent was added and boiled for few minutes. Formation of blue color indicates the presence of amino acid.

10. Detection of diterpenes Copper Acetate Test:

Extracts were dissolved in water and treated with 3-4 drops of copper acetate solution. Formation of emerald green color indicates the presence of diterpenes

11. Gum and Mucilage:

To 1ml of extract add 2.5ml of absolute alcohol and stirring constantly. Then the precipitate was dried in air and examine for its swelling properties. Swelling was observed that will indicate presence of gum and mucilage.

12. Test for Fixed oils and Fats

a. Spot test : A small quantity of extract is pressed between two filter papers. Oil stain on the paper indicates the presence of fixed oils.

13. Test for Quinones

Extract was treated with sodium hydroxide blue or red precipitate indicates the presence of Quinones.

The Preliminary phytochemical studies of aqueous extract of ***Parangipattai Chooranam*** were done using standard procedures. The results were presented in tables. The present study reveals that the bioactive compounds were present in all the extracts of ***Parangipattai Chooranam***.

PHYSIOCHEMICAL ANALYSIS OF –PARANGIPATTAI CHOORANAM

1. **Loss On Drying:**

An accurately weighed 2g of ***Parangipattai Chooranam*** formulation was taken in a tarred glass bottle. The crude drug was heated at 105^0C for 6 hours in an oven till a constant weight. Percentage moisture content of the sample was calculated with reference to the shade dried material.

2. **Determination of total ash:**

Weighed accurately 2g of ***Parangipattai Chooranam*** formulation was added in crucible at a temperature 600^0C in a muffle furnace till carbon free ash was obtained. It was calculated with reference to the air dried drug.

3. **Determination of acid insoluble ash:**

Ash above obtained, was boiled for 5min with 25ml of 1M Hydrochloric acid and filtered using an ash less filter paper. Insoluble matter retained on filter paper was washed with hot water and filter paper was burnt to a constant weight in a muffler furnace. The percentage of acid insoluble as was calculated with reference to the air dried drug.

4. **Determination of water soluble ash:**

Total ash 1g was boiled for 5min with 25ml water and insoluble matter collected on an ash less filter paper was washed with hot water and ignited for 15 min at a temperature not exceeding 450^0C in a muffle furnace. The amount of soluble ash is determined by drying the filtrate.

5. **Determination of water soluble Extractive:**

5gm of air dried drug, coarsely powered ***Parangipattai Chooranam*** was macerated with 100ml of distilled water in a closed flask for twenty-four hours shaking frequently. Solution was filtered and 25 ml of filtrated was evaporated in a tarred flat bottom shallow dish, further dried at 100^0 C and weighted. The percentage of water soluble extractive was calculated with reference to the air dried drugs.

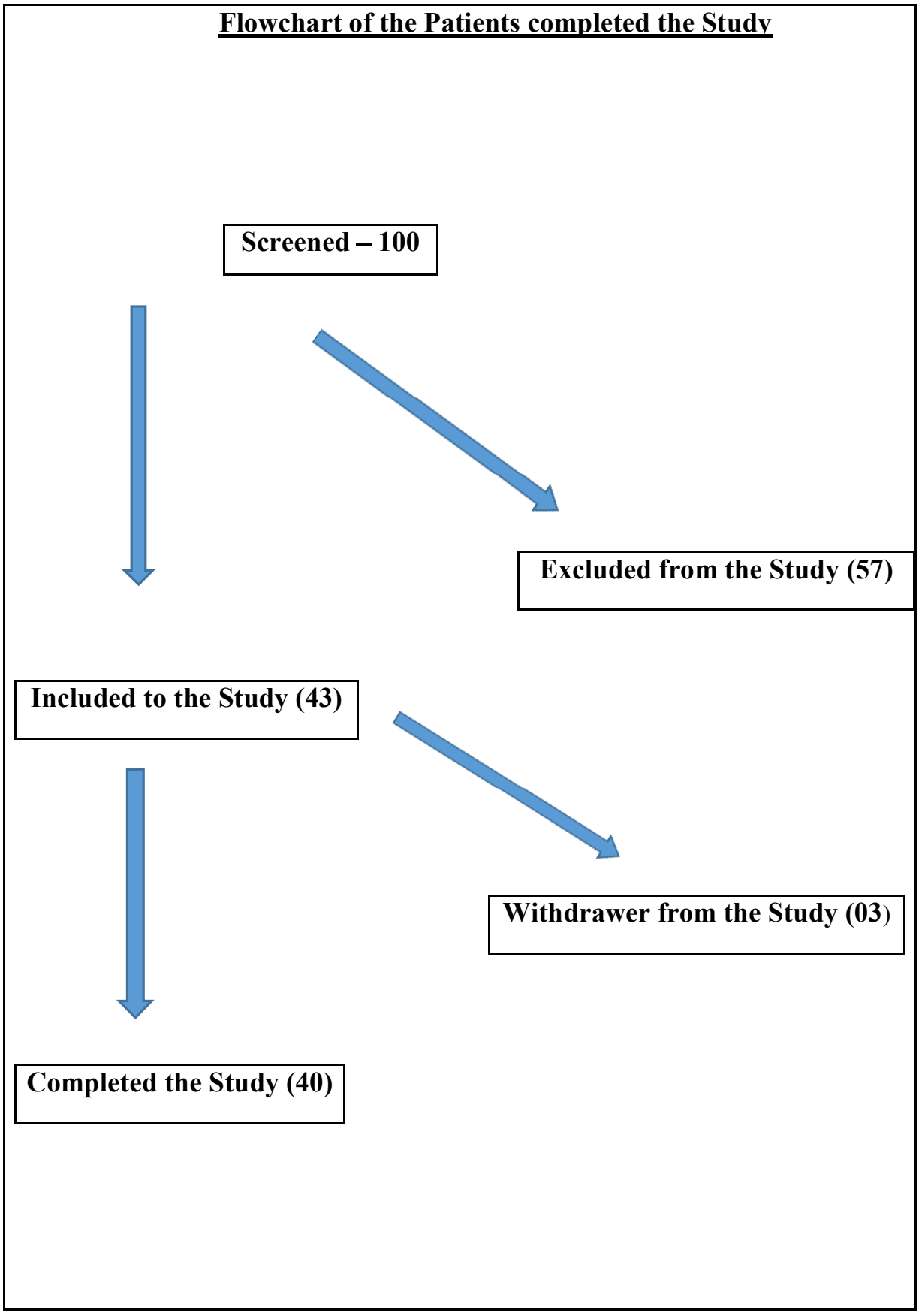
6. Determination of alcohol soluble extractive:

2.5gm. of air dried drugs, coarsely powdered ***Parangipattai Chooranam*** was macerated with 50 ml. alcohol in closed flask for 24 hrs. With frequent shaking it was filtered rapidly taking precaution against loss of alcohol. 10ml of filtrate was then evaporated in a tarred flat bottom shallow dish, dried at 100^0C and weighted. The percentage of alcohol soluble extractive was calculated with reference to air dried drug.

OBSERVATION AND RESULTS

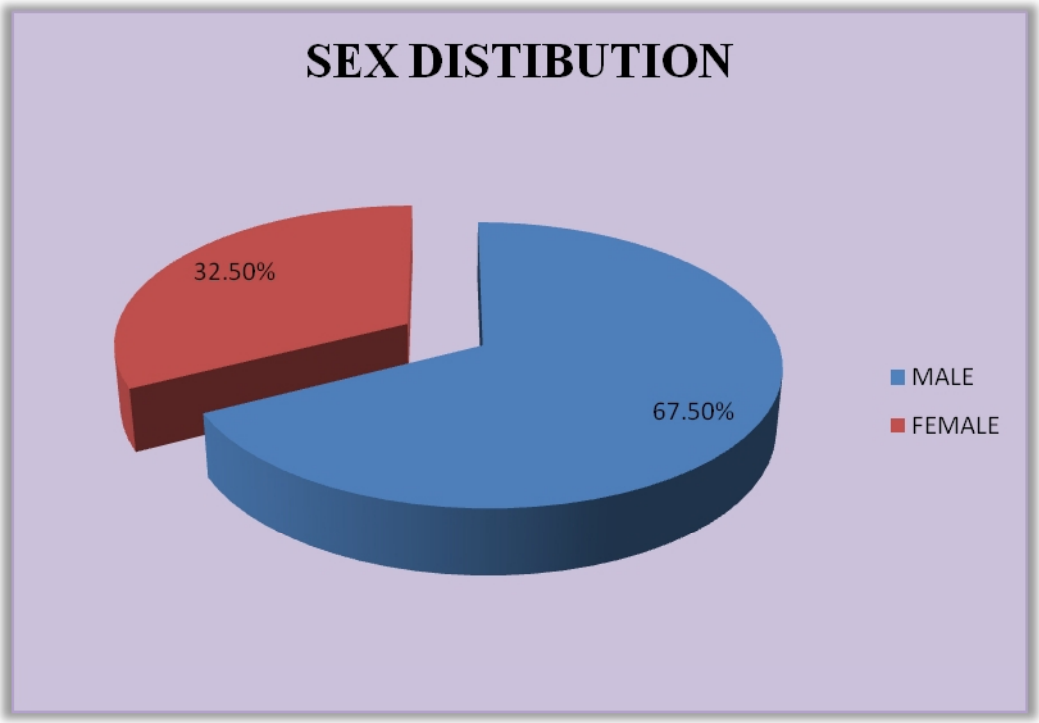
1.	SEX DISTRIBUTION
2.	AGE DISTRIBUTION
3.	FAMILY HISTORY
4.	DIETARY HABITS
5.	THINAI REFERENCE
6.	KAALAM DISTRIBUTION (According to Age):
7.	YAAKAI ILAKKANAM (Physical constitutions)
8.	GUNAM (Quality and characters)
9.	DURATION OF THE ILLNESS
10.	HISTORY OF REMISSION AND RELAPSES
11.	CLINICAL FEATURES
12.	DISTRIBUTION OF MUKKUTRAM
13.	UDAL KATTUKKAL
14.	NEERKKURI REFERENCE
15.	NEIKKURI REFERENCES
16.	ENVAGAI THERVUGAL
17.	PHTOCHEMICAL ANALYSIS
18.	PHYSIOCHEMICAL ANALYSIS
19.	RESULTS
20.	PROGNOSIS:

Flowchart of the Patients completed the Study



1. SEX DISTRIBUTION

SI.NO	SEX	NO OF CASES	PERCENTAGE
1	MALE	27	67.5%
2	FEMALE	13	32.5%

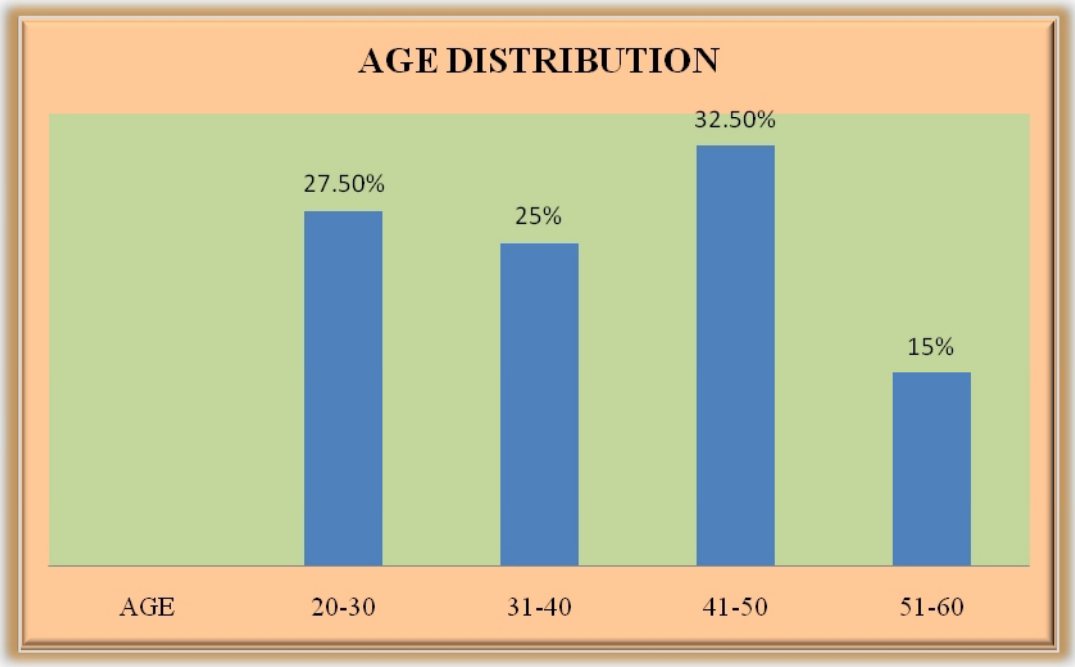


Observation

Among the 40 patients were selected for this study, 67.5% were males and 32.5% were females.

2. AGE DISTRIBUTION

SI.NO	AGE	NO OF CASES	PERCENTAGE
1	20 -30	11	27.50%
2	31 -40	10	25%
3	41-50	13	32.50%
4	51-60	6	15%

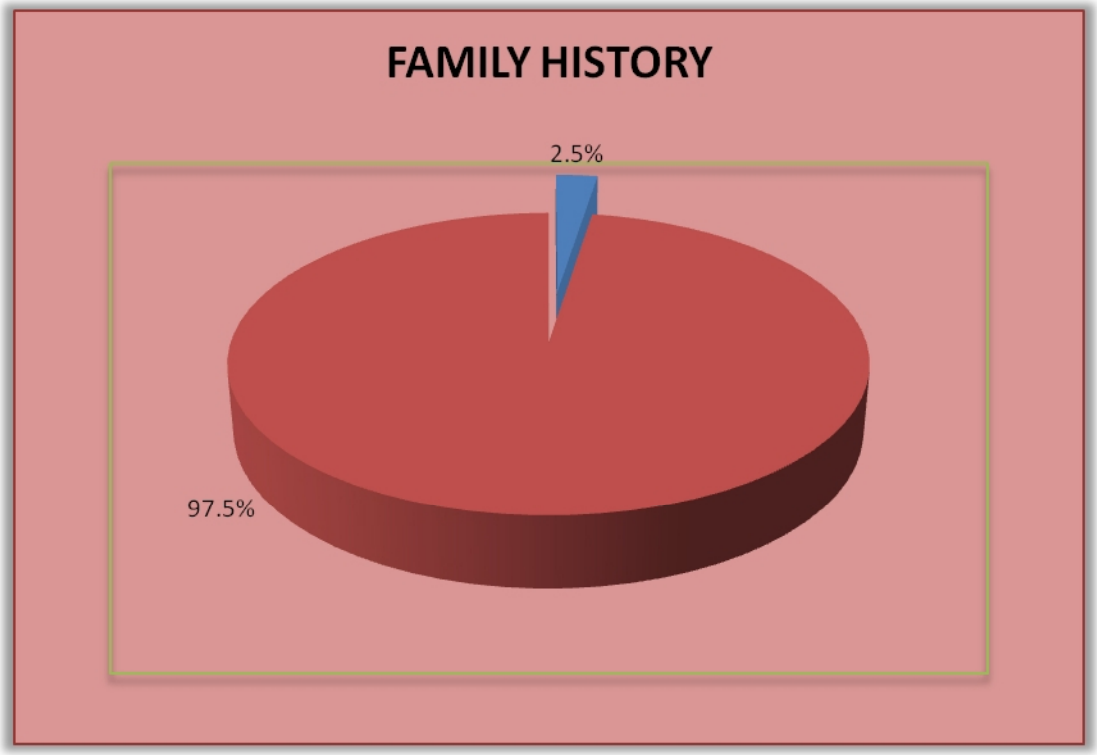


Observation:

The patients were selected were selected from all age groups as given above and the Maximum numbers of patients were in the age between 41 to 50.

3. FAMILY HISTORY

S.NO	Criteria	No of cases	Percentage
1	Family history(+ve)	1	2.5%
2	Family history (-ve)	39	97.5%

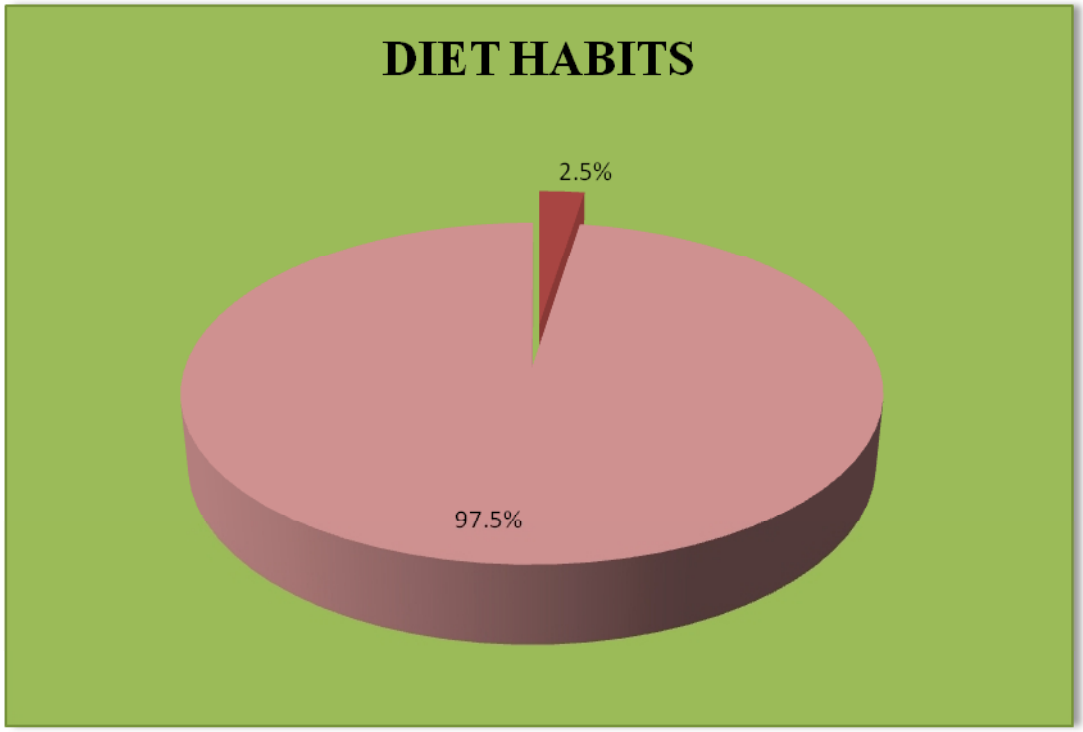


Observation:

97.5% of the patients showed negative family history.

4. DIETARY HABITS

S.NO	Dietary habits	No of cases	Percentage
1	Vegetarian	1	97.5%
2	Non Vegetarian	39	2 .5%

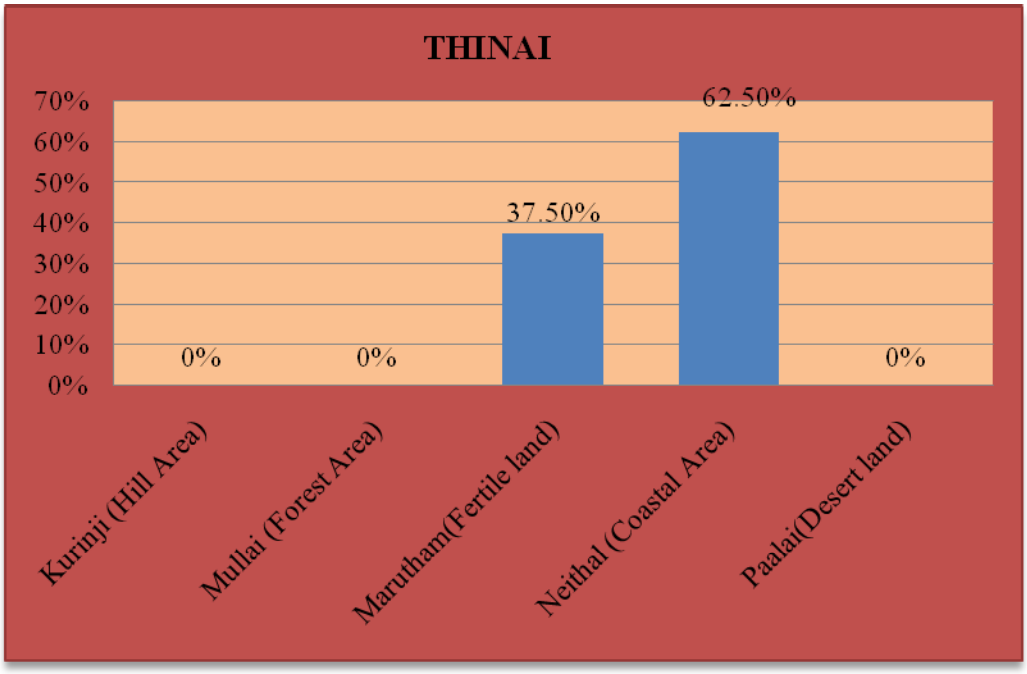


Observation:

97.5% of the cases were non-vegetarians.

5. THINAI REFERENCE

.NO	THINAI	NO OF CASES	PERCENTAGE
1	Kurinji (Hill Area)	0	0%
2	Mullai (Forest Area)	0	0%
3	Marutham (Fertile land)	15	37.5%
4	Neithal (Coastal Area)	25	62.5%
5	Paalai (Desert land)	0	0%



Observation:

62.5% of the patientswere from *Neithal* (Coastal Area) and then remaining 37.5% from *Marutham*(Fertile land).

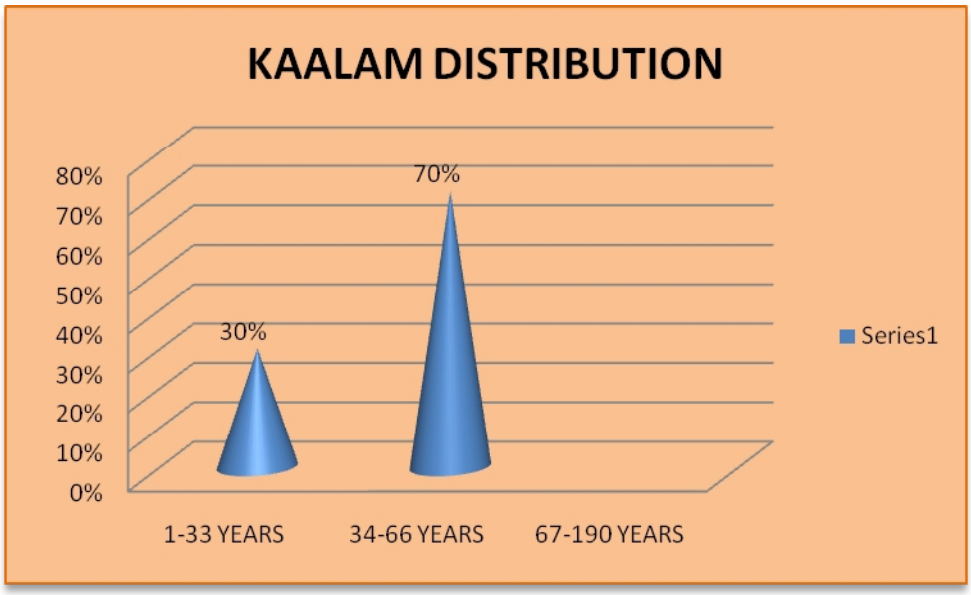
6. KAALAM DISTRIBUTION (According to Age):

In siddha literature human life has been divided into three periods as follows

1. *Vatham*
2. *Pitham*
3. *Kabam*

The duration of each period is said to be 33 years

SI.No	Kaalam	No of cases	Percentage
1	Vaathakaalam (1-33 Years)	12	30%
2	Pithakaalam (34 -66 years)	28	70%
3	Kabakaalam (67 -100 years)	0	0%



Observation:

70% of the patients were *Vathakaalam* and the remaining 30% patients reported in *Pithakaalam*

7. YAAKAIILAKKANAM (Physical constitutions)

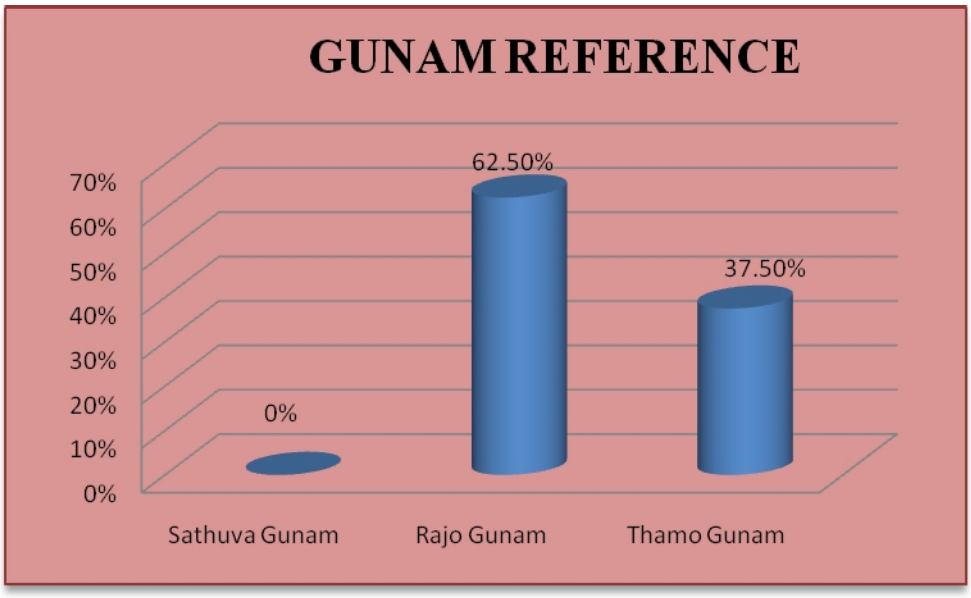
SI.No	Yaakkaiillakkanam	No of cases	Percentage
1	Vaathaudal	0	0%
2	Pithaudal	0	0%
3	Kabaudal	0	0%
4	Thonthaudal	40	100%

Observation:

All the patients (100%) had *Thonthaudal*

8. GUNAM (Quality and characters)

SI.No	Gunam	No of cases	Percentage
1	SathuvaGunam	0	0%
2	RajoGunam	25	62.5%
3	ThamoGunam	15	37.5%

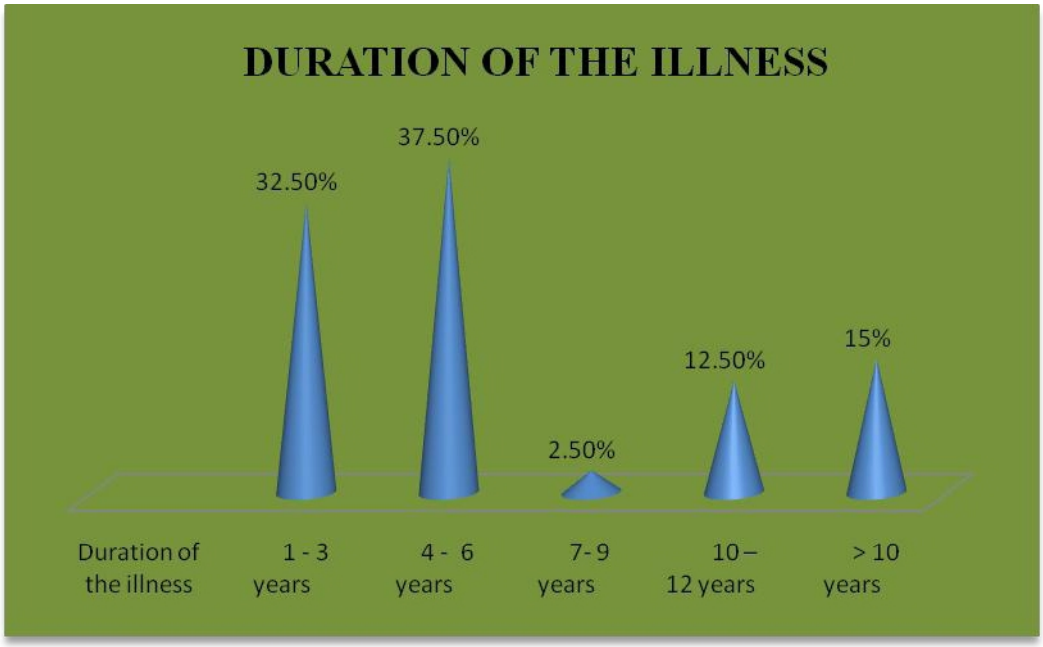


Observation:

62.5% patients had *RajoGunam and 37.5% had Thamogunam.*

9. DURATION OF THE ILLNESS

SI.No	Duration of the illness	No of cases	Percentage
1	1 - 3 years	13	32.5%
2	4 - 6 years	15	37.5%
3	7- 9 years	1	2.5%
4	10 – 12 years	5	12.5%
5	> 10 years	6	15%

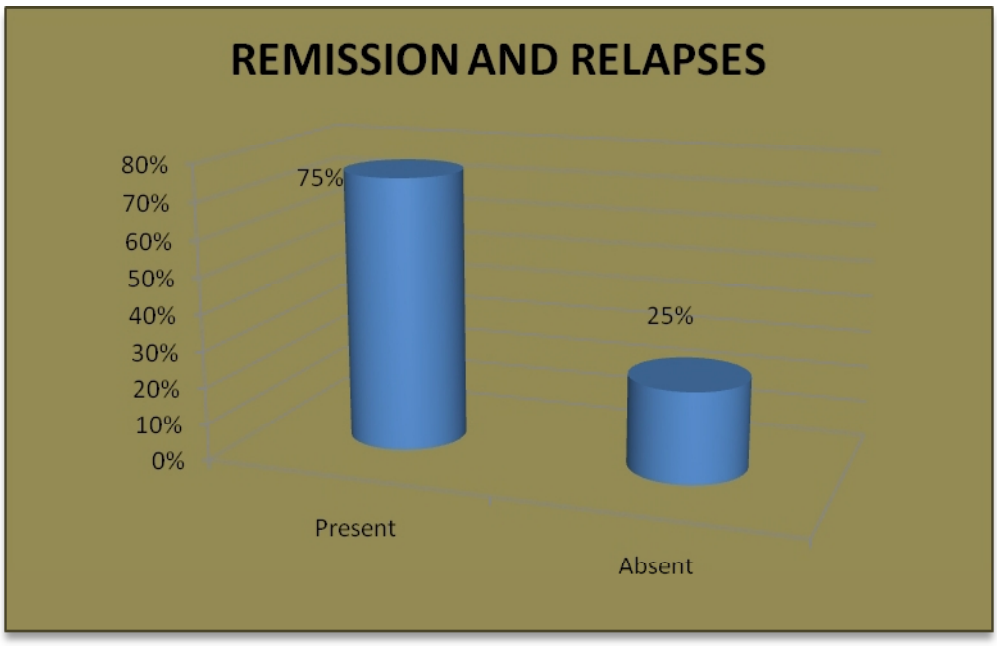


Observation:

37.5% of the patients were suffering with the illness for 4 to 6 years.

10. HISTORY OF REMISSION AND RELAPSES

SI.No	Remissions and Relapses	No of cases	Percentage
1	Present	30	75%
2	Absent	10	25%

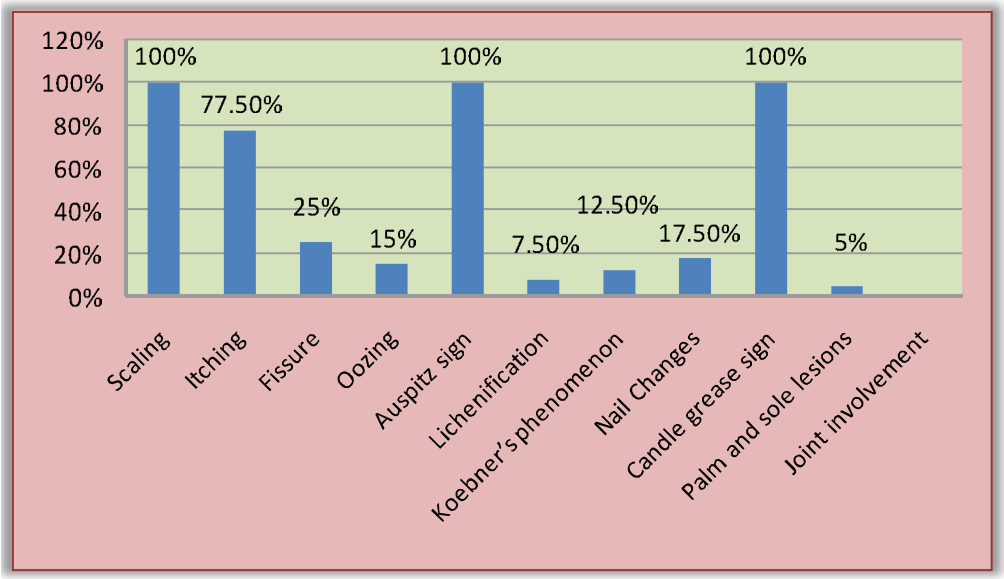


Observation:

75% of the patients had the history of Remission and Relapse.

11. CLINICAL FEATURES

SI.No	Clinical Features	No of cases	Percentage
1	Scaling	40	100%
2	Itching	31	77.5%
3	Fissure	10	25%
4	Oozing	6	15%
5	Auspitz sign	40	100%
6	Lichenification	3	7.5%
7	Koebner's phenomenon	5	12.5%
8	Nail Changes	7	17.5%
9	Candle grease sign	40	100%
10	Palm and sole lesions	2	5%
11	Joint involvement	0	0%



Observation:

In this study 100% of the patients had Scaling, Auspitz sign, and Candle grease sign. 77.5% had Itching, 25% had Fissure, 15% had Oozing, 17.5% had Nail changes, 12.5% had Koebner's phenomenon

12. DISTRIBUTION OF MUKKUTRAM

The derangement of *Vatham, Pitham* inKaalanjagapadai are as follows

Vatham

SI.No	Classification of Vaatham	No of cases	Percentage
1	Praanan	0	0%
2	Abaanan	0	0%
3	Udhanan	0	0%
4	Samaanan	40	100%
5	Viyaanan	40	100%
6	Naagan	0	0%
7	Koorman	0	0%
8	Kirukaran	0	0%
9	Devathathan	5	12.5%
10	Dananjeyan	0	0%

Observation:

Samaanan and Viyanan were affected in all the 100% of the patients. Devathathan were affected in 12.5% of the patients.

PITHAM

SI.No	Classification of Pitham	No of cases	Percentage
1	Analakam	0	0%
2	Ranjakam	2	5%
3	Saathakam	40	100%
4	Prasakam	40	100%
5	Aalosakam	0	0%

Observation:

Saathakam and Prasakam were affected in all the cases. Ranjakam was affected in 5% of the patients.

13. UDAL KATTUKKAL

SI.No	Udalkattukal	No of cases	Percentage
1	Saaram	40	100%
2	Senneer	40	100%
3	Oon	3	7.5%
4	Kozhuppu	0	0%
6	Enbu	0	0%
7	Moolai	0	0%
8	Sukkilam/Suronitham	0	0%

Observation:

Among 40 patients, Saaram, Senneer were affected in all the cases.

14. NEERKKURI REFERENCE

SI.No	Neerkuri	No of cases	Percentage
1	Pale yellow	15	37.5%
2	Yellow	11	27.5%
3	Dark yellow	3	7.5%
4	Straw	1	2.5%
5	Colourless	10	25%

Observations:

In this study 37.5% of the patients had Neerkuri with Pale yellow, 27.5% with yellow, 25% with colourless, 7.5% with dark yellow and 2.5% with straw colour.

15. NEIKKURI REFERENCES

SI.No	NEIKKURI	No of cases	Percentage
1	Aravananeendal (Vaatham)	3	7.5%
2	Azhipolparaviyathu (Pitham)	1	2.5%
3	Muthothuninrathu (Kabam)	23	57.5%
4	Others	13	32.5%

Observation:

In this case 7.5% of the patients had Neikuri with Vatham (Araavananeendathu), 2.5% with Pitham (Azhipolparaviyathu), 57.5% with kabam (Muthothuninrathu) and 32.5% with other pattern.

16. ENVAGAI THERVUGAL

SI.No	EnvagaiThervugal	No of cases	Percentage
1	Naadi		
	a)Vaathapitham	30	75%
	b)Pithavatham	6	15%
	c)Kabavatham	1	2.5%
	d)Kabapitham	3	7.5%
2	Sparisam	25	62.5%
3	Naa	0	0%
4	Niram	40	100%
5	Mozhi	0	0%
6	Vizhi	0	0%
7	Malam	0	0%
8	Moothiram	0	0%

Observation:

In Envagaithervugal, Niram was affected in all the 40 cases. Sparisam was affected in 62.5% of patients.Thenaadinadai seen in *Kaalanjagapadai*patientsVaathapitham 75 %, Pithavatham 15%, kabavatham 2.5%, Kabapitham 7.5%.

17. Phytochemical analysis of the *Paranagiattai chooranam*

S.no	Phytochemicals	Test Name	H2O Extract
1.	Alkaloids	Mayer's Test	**-ve**
		Wagner's Test	**-ve**
		Dragendroff's Test	**-ve**
		Hager's Test	**-ve**
2.	Carbohydrates	Molisch's Test:	**+ve**
		Benedict's Test	**+ve**
3.	Glycoside	Modified Borntrager's Test	**+ve**
		Keller Killiani	**-ve**
4.	Saponin	Froth Test	**+ve**
		Foam Test	**-ve**
5.	Phytosterol	Salkowski's Test	**-ve**
6.	Phenols	Ferric Chloride Test	**-ve**
7.	Tannins	Gelatin Test	**-ve**
8.	Flavonoids	Alkaline Reagent Test	**+ve**
		Lead acetate Test	**+ve**
9.	Proteins and amino acids	Xanthoproteic Test	**+ve**
10.	Diterpenes	Copper Acetate Test	**+ve**
11.	Gum & Mucilage	Extract + Alcohol	**-ve**
12.	Fat & Fixed Oil	Spot Test	**-ve**
13.	Quinones	NAOH + Extract	**+ve**

+ve/-ve present or absent if component tested

18. Physiochemical properties of the *Parangipattai chooranam*

S.no	Parameters	Percentage
1	Loss on drying	2.83%
2	Total ash value	3.14%
3	Acid insoluble ash	Less than 1%
4	Water soluble ash	1.12%
5	Water soluble extraction	47.75%
6	Alcohol soluble extraction	12.74%

19. RESULTS

OPD / IPD CASES CLINICAL IMPROVEMENT

SI.No	OP / IP NO	NAME	AGE /SEX	PASI SCORE			RESULTS
				BT	AT	PASI	
1	IP 9905	E.Arokkiyasamy	36/M	61.6	12.4	PASI 75	GOOD
2	IP0067-18	R.Kumari	39/F	40	3	PASI 75	GOOD
3	IP0244-18	S.Shanthi	52/F	50.1	0.9	PASI 75	GOOD
4	IP028-18	K.Banumathy	42/F	53.4	10.8	PASI 75	GOOD
5	IP0286-18	A.Reginamary	46/F	54	7.1	PASI 75	GOOD
6	IP01314-18	K.Maragatham	23/F	60	34.2	PASI 50	MODERATE
7	IP0344-18	E.Sivaprakasam	56/F	26.1	4	PASI 75	GOOD
8	IP0398-18	U.Sivarajan	26/M	52.2	11.4	PASI 75	GOOD
9	IP 0412-18	N.Magendran	40/M	42	6.6	PASI 75	GOOD
10	IP0440-18	K.Philips	58/M	40	9	PASI 75	GOOD
11	IP0445-18	R.Suganya	27/F	50.4	15.5	PASI 75	GOOD
12	I 69878	P.Neela	49/F	60	14.4	PASI 75	GOOD
13	I 77988	M.Kannan	38/M	60	33	PASI 50	MODERATE
14	J 34545	R.Rajkumar	29/M	46.4	12.3	PASI 75	GOOD
15	J 48749	M.Syedvasim	23/M	46	27.4	PASI 25	MILD
16	J 13057	M.Ravi	42/M	51.6	19.2	PASI 50	MODERATE
17	I 87056	R.N.Muthukrishnan	41/M	61.2	19.2	PASI 75	GOOD
18	J 62036	A.Suhasini	23/F	44.6	17.1	PASI 50	MODERATE
19	I 97780	P.Banumathy	41/M	65.7	43.2	PASI 25	MILD
20	J 81528	I.Farookbasha	35/M	50.1	21.5	PASI 50	MODERATE

SI.NO	OP / IP NO	NAME	AGE/SEX	PASI SCORE			RESULTS
				BT	AT	PASI	
21	J 87800	C.Gurumoorthy	28/M	57.5	7.6	PASI 75	GOOD
22	J 67522	M.M.Jainudheen	29/M	43.2	3.8	PASI 75	GOOD
23	I 31536	V.Deivanayagi	42/F	44.4	8.8	PASI 75	GOOD
24	J 91152	M.Beerjamel	45/M	69.6	64.3	PASI 25	MILD
25	J 81580	E.Ramesh	28/M	46.8	18	PASI 50	MODERATE
26	G 00139	M.Sampath	47/M	40.4	16.5	PASI 50	MODERATE
27	J 54269	S.Rigana	26/F	61.2	12.4	PASI 75	GOOD
28	J 77788	M.Ramachandran	43/M	61.2	15.2	PASI 75	GOOD
29	J 86400	M.Gopi	37/M	56.1	18.6	PASI 50	MODERATE
30	K 02675	K.Narasimman	50/M	50.4	29.4	PASI 25	MILD
31	K 04682	A.Raguman	28/M	66	60	PASI 25	MILD
32	J 65921	S.Prakasam	46/M	61.2	12.4	PASI 75	GOOD
33	I 53668	Chinu raj	51/M	55.2	23.3	PASI 50	MODERATE
34	J 12488	D.Senthil raj	41/M	57.6	23.3	PASI 50	MODERATE
35	J 30741	G.Muthukumar	36/M	70.8	42	PASI 25	MILD
36	H 25851	G.Balamurugan	37/M	61.2	28	PASI 50	MODERATE
37	K 06255	N.Hari	31/M	67.2	14.6	PASI 75	GOOD
38	J 95136	K.Murugesan	52/M	35.7	14.4	PASI 50	MODERATE
39	K 10016	C.Vijayalakshmi	27/F	43.4	16.6	PASI 50	MODERATE
40	K 19342	J.Sridevi	34/M	61.2	11.8	PASI 75	GOOD

NOTE :

BT : Before treatment; AT : After treatment

PASI SCORE

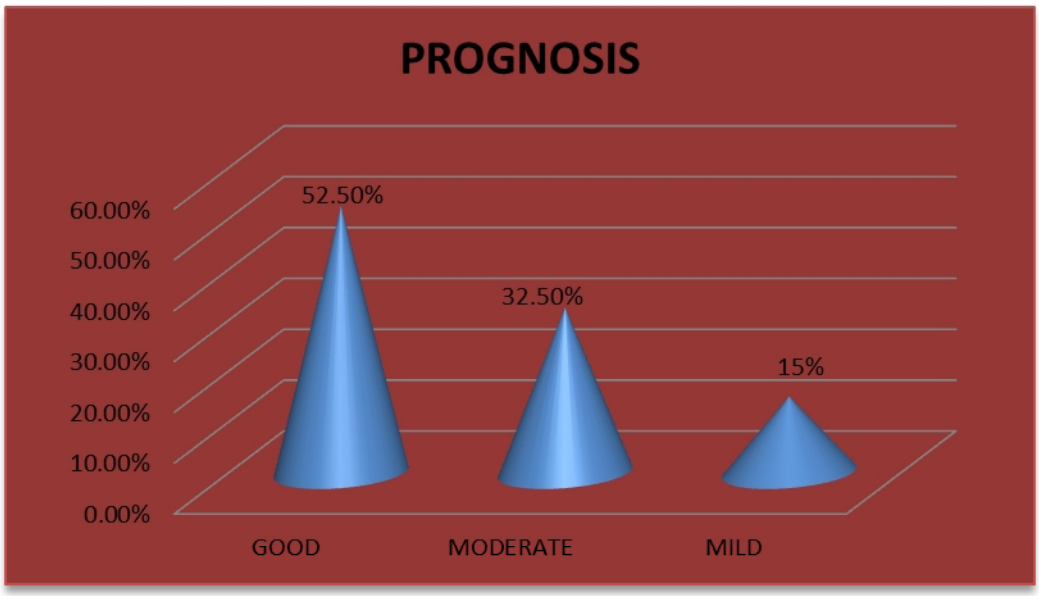
PASI 25 = 25% (Mild) reduction in the PASI Score in before and after treatment.

PASI 50 = 50% (Moderate) reduction inthe PASI Score in before and after treatment.

PASI 75 = 75% (Good) reduction in the PASI Score in before and after treatment.

20. PROGNOSIS:

Sl.No.	RESULTS	NO OF CASES	PERCENTAGE
1	GOOD	21	52.5%
2	MODERATE	13	32.5%
3	MILD	6	15%



Observation:

The trial drug *Paranagipattai chooranam* (Internal) and *Sangamver thylam* (External) were given to 40 patients for 48 days. Good improvement was observed in 21 Patients (52.5%), Moderate improvement in 13 (32.5%), and Mild improvement in 6 (15%) cases.

IP 0244-18 S.SHANTHI 52 / F PASI BEFORE TREATMENT 50.1

PASI AFTER TREATMENT 0.9

J 13057 M.RAVI 42/M PASI BEFORE TREATMENT 51.6

PASI AFTER TREATMENT 19.2

IP 0067 -18 R.KUMARI 39/ F BEFORE TREATMENT PASI 40

AFTER TREATMENT PASI 3

STATISTICAL ANALYSIS

Summary Statistics of PASI Score Before and After treatment

Variable	Mean	Std.dev
Before treatment	53.14	10.05
After treatment	19.08	14.05

Statistical Significance of treatment on PASI Score.

Variable	Obs	Mean ± Std.dev	t Value	p Value
Before treatment	40	53.14 ± 10.05		
After treatment	40	19.08 ± 14.05	18.51	p< 0.0001

All collected were entered into MS Excel software using different columns as variables and rows as patients .SPSS software was used to perform stastical analysis. Basic descriptive stastics include frequency distributions and cross -tabulatons were performed. The quality variables were expressed as Mean ± Standard deviation and qualitative data as percentage. A Probability value of <0.05 was considered to indicate as Stastical significance. Paired t test was performed for determining the significance between before and after treatment. The mean ± standard deviation of PASI Score at before and after treatment were 53.14±10.05 and 19.08±14.05 significance of the p value is 0.0001.

BEFORE AND AFTER TREATMENT

SI. NO	IP/OP NO	NAME	AGE/ SEX	Hb (gms/dl)		Total RBC COUNT (mill/cu.mm)		ESR (mm/hr)		TotalWBC (cells/cu.mm)	
				BT	AT	BT	AT	BT	AT	BT	AT
1	IP 9905	E.Arokkiyasamy	36/M	15.7	16	4.6	5	34/70	16/42	8,600	7,100
2	IP 0067-18	R.Kumari	39/F	12.5	12	4.5	4.8	11/20	9/20	6,100	7,600
3	IP 0244-18	S.Shanthi	52/F	12.4	11.9	4.5	4.3	12/24	12/22	6,400	7,200
4	IP 0284-18	K.Banumathy	42/F	11.7	12	4.0	5	32/66	31/64	9,200	9,220
5	IP 0286-18	A.Reginamary	46/F	14.4	14.5	4.9	4.9	16/32	16/32	7,200	8,400
6	IP 01314-18	K.Maragatham	23/F	12.1	12.5	4.3	5.5	13/34	13/34	8,300	8,000
7	IP 0344-18	E.Sivaprakasam	56/M	15.2	15.2	4.7	4.8	20/40	20/40	12,800	10,900
8	IP 0398-18	U.Sivarajan	26/M	15.6	14.6	5.4	5.0	2/6	2/4	7,800	6,100
9	IP 0440-18	K.Philips	58/M	14.6	14.6	4.4	5	6/14	5/13	9,200	9,000
10	1P 0412-18	Magendran	40/M	12.7	12	3.7	4	4/10	6/8	5,600	6,000
11	IP 0445-18	R.Suganya	27/F	12.5	11.5	4.3	4.1	14/30	14/30	6,500	7,100
12	I 69878	P.Neela	49/F	13.5	13	4.5	4	6/12	6/13	8,100	8,100
13	I 77988	M.Kannan	38/M	16.5	16	5.5	4.5	6/12	6/10	10,200	11,500
14	J 34545	R.Rajkumar	29/M	14.1	14.1	4.8	4.9	4/8	4/9	6,500	6,500
15	J 48749	M.Syedvasim	23/M	14.0	15.0	5.2	5.4	4/18	4/18	5,400	5,900
16	J 13057	M.Ravi	42/M	15.7	14.7	5.7	5.2	4/8	4/6	4000	6,400
17	I 87056	R.N.Muthukrishnan	41/M	15.0	14.2	4.2	3.9	14/18	16/34	6,900	5,000
18	J 62036	A.Suhasiny	23/F	11.8	11	4.3	4.4	30/60	20/42	5,800	5,600
19	I 97780	P.Banumathy	41/F	13.8	13	4.7	4.5	6/12	4/10	10,100	9,000
20	J 81528	I.Farookbasha	35/M	16.6	16	5.5	5.4	6/14	5/11	9,900	9,000

S.NO	IP/OP NO	NAME	AGE/ SEX	Hb (gms/dl)		Total RBC COUNT (milli/cu.mm)		ESR (mm/hr)		Total WBC (cells/cu.mm)	
				BT	AT	BT	AT	BT	AT	BT	AT
21	J 87800	C.Gurumoorthy	28/M	13.0	13.6	3.8	4	10/24	9/21	5,800	6,800
22	J 67522	M.M. Jainudeen	29/M	15.9	15.1	5.3	4.9	2/6	2/6	7,800	6,000
23	I 31536	V.Deivanayagi	42/F	11.6	11	3.8	4.4	12/26	10/24	6,800	7,000
24	J 91152	M.Beerjamel	45/M	14.9	14	5.2	5	2/4	2/4	7,800	8,200
25	J 81580	E.Ramesh	28/M	15	14	5.3	5.1	4/8	4/8	7,700	7,800
26	G 00139	M.Sampath	47/M	14.6	14.5	5.0	4.9	4/16	4/16	8,800	6,400
27	J 54269	S.Rigana	26/F	11.5	11	4.8	5	5/16	4/8	7,200	8,000
28	J 77788	M.Ramachandran	43/M	14.1	14.2	4.9	4.8	6/12	6/12	8,500	6,900
29	J 86400	N.Gopi	37/M	15	14	4.8	4.9	2/10	3/7	8,000	7,900
30	K 02675	K.Narasimman	50/M	12.5	11.6	3.9	3.8	10/20	10/18	5,100	6,600
31	K 04682	A.Raguman	28/M	15.4	14.4	5.4	5	6/12	4/8	7,000	9,000
32	J 65921	S.Prakasam	46/M	14.4	14.7	5.3	5.1	2/8	2/8	8,800	8,000
33	I 53668	S.Chinu raj	51/M	14	13	4.4	4.1	4/10	4/8	8,800	9,000
34	J 12488	D.Senthil raj	41/M	14.5	12.5	5.1	4.4	10/20	10/18	7,200	9,200
35	J 30741	G.Muthukumar	36/M	14.4	14.2	4.6	4.4	4/10	4/8	5,500	5,000
36	G 25851	G.Balamurugan	37/M	16	15	5.2	5.4	10/22	9/20	7,200	7,500
37	K 06255	N.Hari	31/M	14.4	14.0	4.8	5	4/10	4/9	12,600	12,000
38	J 95136	K.Murugesan	52/M	14.8	14.5	4.6	5.2	7/10	4/8	8,100	8,600
39	K 10016	C.Vijayalakshmi	27/F	11.2	11.1	4.3	4	22/44	22/43	7,900	7,100
40	K 19342	J.Sridevi	34/F	11	11.5	4.2	4.8	4/10	4/8	10,900	10,000

SI. NO	IP/OP NO	NAME	AGE/ SEX	SGOT (IU/L)		SGPT (IU/L)		Alkaline phosphatase	
				BT	AT	BT	AT	BT	AT
1	IP 9905	E.Arokkiyasamy	36/M	19	14	15	13	64	63
2	IP0067-18	R.Kumari	39/F	17	16	12	11	70	112
3	IP0244-18	S.Shanthi	52/F	17	18	13	12	114	100
4	IP0284-18	K.Banumathy	42/F	12	18	11	8	84	111
5	IP0286-18	A.Reginamary	46/F	13	13	21	19	96	103
6	IP01314.18	K.Maragatham	23/F	21	20	30	28	69	77
7	IP 0344-18	E.Sivaprakasam	56/M	19	18	18	10	97	86
8	IP 0398-18	U.Sivarajan	26/M	19	17	15	17	78	102
9	IP0440-18	K.Philips	58/M	22	20	14	17	80	86
10	1P0412-18	Magendran	40/M	36	29	19	23	51	77
11	IP0445-18	R.Suganya	27/F	24	15.8	15	15.7	112	114
12	I 69878	P.Neela	49/F	19	18	10	13	53	60
13	I 77988	M.Kannan	38/M	0.4	0.4	29	27	93	111
14	J 34545	R.Rajkumar	29/M	20	22	26	23	70	77
15	J 48749	M.Syedvasim	23/M	19	20	28	42	115	113
16	J 13057	M.Ravi	42/M	20	25	17	25	80	73
17	I 87056	R.N.Muthukrishnan	41/M	20	14	28	13	71	64
18	J 62036	A.Suhasiny	23/F	17	17	14	15	70	77
19	I 97780	P.Banumathy	41/F	15	15	17	14	66	67
20	J 81528	I.Farookbasha	35/M	14	20	20	19	60	77

SI.NO	IP /OP NO	NAME	AGE/ SEX	SGOT (IU/L)		SGPT (IU/L)		Alkaline phosphatase	
				BT	AT	BT	AT	BT	AT
21	J 87800	C.Gurumoorthy	28/M	20	19	16	17	107	109
22	J 67522	M.M. Jainudeen	29/M	23	19	20	17	84	72
23	I 31536	V.Deivanayagi	42/F	20	18	20	26	72	77
24	J 91152	M.Beerjamel	45/M	24	26	43	35	47	45
25	J 81580	E.Ramesh	28/M	30	24	44	29	100	94
26	G 00139	M.Sampath	47/M	14	14	15	13	81	59
27	J 54269	S.Rigana	26/F	10	12	17	20	59	88
28	J 77788	M.Ramachandran	43/M	17	16	9	16	94	74
29	J 86400	N.Gopi	37/M	30	35	38	35	87	112
30	K 02675	K.Narasimman	50/M	38	24	27	29	63	75
31	K 04682	A.Raguman	28/M	20	33	31	35	91	112
32	J 65921	S.Prakasam	46/M	16	22	29	33	66	72
33	I 53668	S.Chinu raj	51/M	19	14	22	18	88	76
34	J 12488	D.Senthil raj	41/M	20	14	27	15	63	75
35	J 30741	G.Muthukumar	36/M	15	23	18	33	65	77
36	G 25851	G.Balamurugan	37/M	16	17	18	22	70	77
37	K 06255	N.Hari	31/M	20	23	18	17	84	112
38	J 95136	K.Murugesan	52/M	13	17	17	16	87	117
39	K 10016	C.Vijayalakshmi	27/F	13	14	6	11	74	83
40	K 19342	J.Sridevi	34/F	18	28	23	25	72	97

SI. NO	IP/OP NO	NAME	AGE/ SEX	TOTAL BILIRUBIN		DIRECT BILIRUBN		INDIRECT BILIRUBIN	
				BT	AT	BT	AT	BT	AT
1	IP 9905	E.Arokkiyasamy	36/M	0.7	0.5	0.4	0.3	0.3	0.3
2	IP 0067-18	R.Kumari	39/F	0.6	0.4	0.3	0.2	0.2	0.1
3	IP 0244-18	S.Shanthi	52/F	0.4	0.7	0.2	0.2	0.2	0.5
4	IP 0284-18	K.Banumathy	42/F	0.3	0.4	0.1	0.2	0.2	0.2
5	IP 0286-18	A.Reginamary	46/F	0.4	0.5	0.1	0.2	0.3	0.3
6	IP 01314-18	K.Maragatham	23/F	0.8	1.2	0.3	0.2	0.4	0.3
7	IP 0344-18	E.Sivaprakasam	56/M	0.7	1.1	0.3	0.3	0.5	0.6
8	IP 0398-18	U.Sivarajan	26/M	0.6	0.4	0.5	1.1	0.9	0.7
9	IP 0440-18	K.Philips	58/M	0.4	0.5	0.4	0.6	0.3	0.6
10	1P0412-18	Magendran	40/M	1.5	1.2	0.6	1.1	0.9	0.7
11	IP 0445-18	R.Suganya	27/F	0.6	0.5	0.3	0.2	0.3	0.3
12	I 69878	P.Neela	49/F	0.3	0.9	0.3	0.4	0.1	0.3
13	I 77988	M.Kannan	38/M	0.8	0.7	0.4	0.2	0.4	0.4
14	J 34545	R.Rajkumar	29/M	1.0	1.2	0.4	0.5	0.6	0.7
15	J 48749	M.Syedvasim	23/M	1.0	1.3	0.4	0.5	0.6	0.8
16	J 13057	M.Ravi	42/M	0.5	0.6	0.2	0.1	0.3	0.3
17	I 87056	R.N.Muthukrishnan	41/M	1.3	1.6	0.4	0.5	0.9	0.1
18	J 62036	A.Suhasiny	23/F	0.3	0.7	0.1	0.1	0.2	0.3
19	I 97780	P.Banumathy	41/F	0.8	0.7	15	15	0.5	0.5
20	J 81528	I.Farookbasha	35/M	0.9	0.6	0.3	0.3	0.6	0.1

SI.NO	IP/OP NO	NAME	AGE/ SEX	TOTAL BILIRUBIN		DIRECT BILIRUBIN		INDIRECT BILIRUBIN	
				BT	AT	BT	AT	BT	AT
21	J 87800	C.Gurumoorthy	28/M	1.8	1.8	0.7	0.6	1.2	0.5
22	J 67522	M.M. Jainudeen	29/M	0.8	1.2	0.3	0.4	0.5	0.4
23	I 31536	V.Deivanayagi	42/F	0.7	1.2	0.3	1.2	0.5	0.7
24	J 91152	M.Beerjamel	45/M	1.0	1.2	0.4	0.7	0.6	0.5
25	J 81580	E.Ramesh	28/M	0.7	0.9	0.3	0.3	0.4	0.7
26	G 00139	M.Sampath	47/M	1.2	1.1	1.2	1.1	0.8	0.7
27	J 54269	S.Rigana	26/F	0.3	1.2	0.1	1.1	0.2	0.7
28	J 77788	M.Ramachandran	43/M	0.6	0.7	0.2	0.3	0.4	0.7
29	J 86400	N.Gopi	37/M	0.5	1.1	0.2	1.2	0.3	0.4
30	K 02675	K.Narasimman	50/M	0.8	1.4	0.3	0.5	0.5	0.9
31	K 04682	A.Raguman	28/M	1.1	1.2	0.4	0.7	0.8	0.7
32	J 65921	S.Prakasam	46/M	0.8	1.2	0.3	0.3	0.5	0.4
33	I 53668	S.Chinu raj	51/M	1.0	0.9	0.3	1.1	0.7	0.8
34	J 12488	D.Senthil raj	41/M	0.9	0.9	0.3	0.7	0.6	0.7
35	J 30741	G.Muthukumar	36/M	1.0	1.1	1.1	1.2	0.7	0.7
36	G 25851	G.Balamurugan	37/M	0.8	0.3	0.6	0.3	0.6	0.4
37	K 06255	N.Hari	31/M	0.6	1.1	0.3	1.1	0.4	0.6
38	J 95136	K.Murugesan	52/M	0.2	0.5	0.2	0.5	0.3	1.2
39	K 10016	C.Vijayalakshmi	27/F	0.4	0.6	0.2	0.3	0.2	0.7
40	K 19342	J.Sridevi	34/F	0.3	0.7	0.2	0.1	0.5	0.7

SI. NO	IP/OP NO	NAME	AGE/ SEX	FASTING (mg/dl)		POST PRANDIAL (mg/dl)		UREA (mg/dl)		CREATININE (mg/dl)	
				BT	AT	BT	AT	BT	AT	BT	AT
1	IP 9905	E.Arokkiyasamy	36/M	94	97	110	112	11	12	1.2	1.1
2	IP 0067-18	R.Kumari	39/F	95	91	102	104	24	20	1.1	1.0
3	IP 0244-18	S.Shanthi	52/F	104	103	130	131	17	16	0.8	0.9
4	IP 0284-18	K.Banumathy	42/F	87	107	97	120	12	11	0.7	0.6
5	IP 0286-18	A.Reginamary	46/F	100	120	100	118	10	13	0.7	0.8
6	IP 01314-18	K.Maragatham	23/F	87	90	92	101	13	14	0.8	0.9
7	IP 0344-18	E.Sivaprakasam	56/M	104	114	128	129	11	15	0.9	1.1
8	IP 0398-18	U.Sivarajan	26/M	98	99	110	117	14	15	0.6	0.5
9	IP 0440-18	K.Philips	58/M	81	89	112	120	14	19	1.0	1.1
10	1P0412-18	Magendran	40/M	86	88	121	129	13	14	0.7	0.6
11	IP 0445-18	R.Suganya	27/F	83	100	90	108	13	17	0.7	0.8
12	I 69878	P.Neela	49/F	94	117	99	119	41	40	1.1	1.0
13	I 77988	M.Kannan	38/M	85	100	98	115	12	16	1.0	0.6
14	J 34545	R.Rajkumar	29/M	80	93	74	124	14	16	1.0	1.2
15	J 48749	M.Syedvasim	23/M	99	104	89	129	13	14	1.4	1.1
16	J 13057	M.Ravi	42/M	85	114	98	108	22	16	1.4	1.3
17	I 87056	R.N.Muthukrishnan	41/M	89	105	88	106	24	22	1.0	0.6
18	J 62036	A.Suhasiny	23/F	93	99	87	115	18	26	0.9	1.2
19	I 97780	P.Banumathy	41/F	94	142	93	160	21	19	0.7	0.8
20	J 81528	I.Farookbasha	35/M	89	135	90	139	20	17	0.9	0.8

SI. NO	IP/OP NO	NAME	AGE/ SEX	FASTING (mg/dl)		POST PRANDIAL (mg/dl)		UREA (mg/dl)		CREATININE (mg/dl)	
				BT	AT	BT	AT	BT	AT	BT	AT
21	J 87800	C.Gurumoorthy	28/M	102	130	110	135	14	20	1.0	1.0
22	J 67522	M.M. Jainudeen	29/M	84	106	95	106	16	17	1.0	1.0
23	I 31536	V.Deivanayagi	42/F	77	94	88	120	26	40	1.1	0.8
24	J 91152	M.Beerjamel	45/M	91	100	96	117	11	13	0.9	0.9
25	J 81580	E.Ramesh	28/M	99	106	98	120	16	20	1.2	1.2
26	G 00139	M.Sampath	47/M	77	121	98	129	24	23	1.2	1.1
27	J 54269	S.Rigana	26/F	82	132	99	134	21	23	0.7	0.9
28	J 77788	M.Ramachandran	43/M	98	105	97	135	23	19	0.9	0.7
29	J 86400	N.Gopi	37/M	95	111	98	123	11	20	0.9	0.7
30	K 02675	K.Narasimman	50/M	103	133	112	139	18	23	0.8	1.2
31	K 04682	A.Raguman	28/M	91	112	98	120	13	20	1.0	1.1
32	J 65921	S.Prakasam	46/M	85	129	98	112	14	17	1.0	0.9
33	I 53668	S.Chinu raj	51/M	110	130	98	120	13	32	0.9	1.1
34	J 12488	D.Senthil raj	41/M	115	130	110	135	13	14	0.9	0.7
35	J 30741	G.Muthukumar	36/M	89	127	98	132	28	33	1.1	1.2
36	G 25851	G.Balamurugan	37/M	100	135	98	138	10	17	1.0	1.2
37	K 06255	N.Hari	31/M	107	129	89	130	15	18	1.0	0.8
38	J 95136	K.Murugesan	52/M	94	138	93	135	20	17	1.1	1.2
39	K 10016	C.Vijayalakshmi	27/F	98	135	89	134	20	28	0.9	0.9
40	K 19342	J.Sridevi	34/F	82	123	90	130	17	22	0.9	1.1

SI. NO	IP/OP NO	NAME	AGE/ SEX	URINE SUGAR (F)		URINE SUGAR (PP)		ALBUMIN		DEPOSITS			
										Epithelial cells		Pus cells	
				BT	AT	BT	AT	BT	AT	BT	AT	BT	AT
1	IP 9905	E.Arokkiyasamy	36/M	NIL	NIL	NIL	NIL	NIL	NIL	2-4	2-3	2-4	1-2
2	IP 0067-18	R.Kumari	39/F	NIL	NIL	NIL	NIL	NIL	NIL	2-3	1-2	1-2	0
3	IP 0244-18	S.Shanthi	52/F	NIL	NIL	NIL	NIL	NIL	NIL	3-5	2-3	1-3	1-2
4	IP 0284-18	K.Banumathy	42/F	NIL	NIL	NIL	NIL	NIL	NIL	3-5	1-2	1-2	1-2
5	IP 0286-18	A.Reginamary	46/F	NIL	NIL	NIL	NIL	NIL	NIL	2-3	1-2	1-2	0
6	IP 01314-18	K.Banumathy	23/F	NIL	NIL	NIL	NIL	NIL	NIL	3-4	2-3	1-2	1-2
7	IP 0344-18	E.Sivaprakasam	56/M	NIL	NIL	NIL	NIL	NIL	NIL	2-3	1-2	1-2	0
8	IP 0398-18	U.Sivarajan	26/M	NIL	NIL	NIL	NIL	NIL	NIL	2-4	2-3	1-2	1-3
9	IP 0440-18	K.Philips	58/M	NIL	NIL	NIL	NIL	NIL	NIL	2-4	2-4	2-3	1-3
10	IP0412-18	Magendran	40/M	NIL	NIL	NIL	NIL	NIL	NIL	2-3	1-2	2-3	1-3
11	IP 0445-18	R.Suganya	27/F	NIL	NIL	NIL	NIL	NIL	NIL	2-3	2-3	1-2	0
12	I 69878	P.Neela	49/F	NIL	NIL	NIL	NIL	NIL	NIL	3-6	2-4	1-2	2-4
13	I 77988	M.Kannan	38/M	NIL	NIL	NIL	NIL	NIL	NIL	2-3	3-4	1-2	2-3
14	J 34545	R.Rajkumar	29/M	NIL	NIL	NIL	NIL	NIL	NIL	2-4	2-3	1-2	1-2
15	J 48749	M.Syedvasim	23/M	NIL	NIL	NIL	NIL	NIL	NIL	2-3	1-2	2-4	1-2
16	J 13057	M.Ravi	42/M	NIL	NIL	NIL	NIL	NIL	NIL	2-4	1-3	1-2	1-2
17	I 87056	R.N.Muthukrishnan	41/M	NIL	NIL	NIL	NIL	NIL	NIL	2-3	2-3	1-2	1-3
18	J 62036	A.Suhasiny	23/F	NIL	NIL	NIL	NIL	NIL	NIL	2-4	2-3	2-3	1-2
19	I 97780	P.Banumathy	41/F	NIL	NIL	NIL	NIL	NIL	NIL	2-5	1-2	1-2	1-2
20	J 81528	I.Farookbasha	35/M	NIL	NIL	NIL	NIL	NIL	NIL	2-3	1-3	1-2	1-2

SI. NO	IP/OP NO	NAME	AGE/ SEX	URINE SUGAR(F)		URINE SUGAR (PP)		ALBUMIN		DEPOSITS			
										Epithelial cells		Pus cells	
				BT	AT	BT	AT	BT	AT	BT		AT	
21	J 87800	C.Gurumoorthy	28/M	NIL	NIL	NIL	NIL	NIL	NIL	1-2	1-3	1-2	1-2
22	J 67522	M.M. Jainudeen	29/M	NIL	NIL	NIL	NIL	NIL	NIL	1-2	1-2	1-3	1-2
23	I 31536	V.Deivanayagi	42/F	NIL	NIL	NIL	NIL	NIL	NIL	1-3	1-4	1-3	1-2
24	J 91152	M.Beerjamel	45/M	NIL	NIL	NIL	NIL	NIL	NIL	1-4	1-3	1-4	1-2
25	J 81580	E.Ramesh	28/M	NIL	NIL	NIL	NIL	NIL	NIL	1-3	1-4	1-3	1-2
26	G 00139	M.Sampath	47/M	NIL	NIL	NIL	NIL	NIL	NIL	1-3	1-4	1-3	1-2
27	J 54269	S.Rigana	26/F	NIL	NIL	NIL	NIL	NIL	NIL	1-4	1-3	1-2	1-2
28	J 77788	M.Ramachandran	43/M	NIL	NIL	NIL	NIL	NIL	NIL	1-3	1-4	1-2	0
29	J 86400	N.Gopi	37/M	NIL	NIL	NIL	NIL	NIL	NIL	1-3	1-3	1-3	1-2
30	K 02675	K.Narasimman	50/M	NIL	NIL	NIL	NIL	NIL	NIL	1-3	1-3	1-4	1-2
31	K 04682	A.Raguman	28/M	NIL	NIL	NIL	NIL	NIL	NIL	1-4	1-5	1-2	1-2
32	J 65921	S.Prakasam	46/M	NIL	NIL	NIL	NIL	NIL	NIL	1-4	1-2	1-2	1-2
33	I 53668	S.Chinu raj	51/M	NIL	NIL	NIL	NIL	NIL	NIL	1-4	1-2	1-2	0
34	J 12488	D.Senthil raj	41/M	NIL	NIL	NIL	NIL	NIL	NIL	1-4	1-2	1-4	1-3
35	J 30741	G.Muthukumar	36/M	NIL	NIL	NIL	NIL	NIL	NIL	1-5	1-4	1-2	1-2
36	G 25851	G.Balamurugan	37/M	NIL	NIL	NIL	NIL	NIL	NIL	1-3	1-3	1-3	1-3
37	K 06255	N.Hari	31/M	NIL	NIL	NIL	NIL	NIL	NIL	1-4	1-3	1-4	1-3
38	J 95136	K.Murugesan	52/M	NIL	NIL	NIL	NIL	NIL	NIL	1-4	1-2	1-3	1-2
39	K 10016	C.Vijayalakshmi	27/F	NIL	NIL	NIL	NIL	NIL	NIL	1-4	1-3	1-4	1-2
40	K 19342	J.Sridevi	34/F	NIL	NIL	NIL	NIL	NIL	NIL	1-3	1-3	1-3	1-2

DISCUSSION

The purpose of this trial is to evaluate the efficacy of the Siddha herbal formulation *"Parangipattai Chooranam* "(Internal) and "*Sangamver Thylam*" (External) in the treatment of Kaalanjakapadai (Psoriasis).

Kaalanjakapadai (Psoriasis) is one of the commonest Skin disorder seen in day to day dermatological practice. It is chronic, inflammatory and proliferative skin disease with scaling and itching. Even though, Kaalanjagapadai is non-contagious disease, the affected patients with self – consciousness, frustruation and excommunication from the family/society shame, often leading to severe mental depression. Remissions and relapse of this disease is quite common and there is no specific treatment available in other systems of medicine. However encouraging results are obtained in our Siddha system. With this background the disease *Kaalanjaga padai* was chosen for the dissertation work.

Based on various criteria, the data were collected and tabulated. The criteria were age distribution, sex predominance, family history, dietary habits and incidence of the disease with reference to thinai, seasonal variation, clinical manifestations and assessment of the improvement in the prognosis of the disease with the trial drug.

The trial drug was prepared in Gunapadam lab of National Institute of Siddha after the authentication of the raw drugs by Assistant professor of medicinal botany NIS Chennai.

The Biochemical, study of the trial drug was done and the results were documented. The Bio-chemical analysis of *Parangipattai Chooranam* had shown the presence of Sulphate, Chloride, Carbonate, Iron, Calcium, Potassium, Phosphate, Reducing Sugar, Starch and Alkaloids, Preliminary phytochemical screening test was carried out for each extracts of *Parangipattai chooranam* in standard procedure had reveals the presence of **Carbohydrates, Glycoside, Saponin, Flavonoids, Protein and Amino acids, Diterpenes**, **and Quinones** and Physiochemical analysis results had shown, Loss on drying is 2.83%, Total ash value is 3.14%, Acid insoluble ash is less than 1%, Water soluble ash is 1.12%. Water soluble extraction is 47.75%, Alcohol soluble extraction is 12.74%.

The Clinical study was conducted with well-defined protocol and a proper Proforma after the approval of Institutional Ethical Committee. For this dissertation study, 40 patients were selected, 29 patients were treated in the Outpatient department of *Sirappu Maruthuvam* and 11 patients were admitted in the IP department of *Sirappu Maruthuvam*, in Ayothidoss Pandithar Hospital - National Institute of Siddha, Tambaram Sanatorium, Chennai – 600 047.

In Siddha System, the first day of treatment is necessary to balancing the vitiated *kutram*. Hence *a Meganatha kuligai 2 tablet with* Hot water was given for Viresanam (Purgation) in the early morning to normalize the vitiated *vaatha kutram*. During the treatment, the patients were advised to follow *pathiyam* (Dietary regimen).

Internal Drug: *Parangipattai chooranam- 2 gm b.d* with warm water .

External Drug: *Sangamver thylam- q.s* for external application.

40 patients of both genders were recruited for this study. Among the 40 cases, 27(67.5%) were males and 13(32.5%) were females. Generally *Kaalanjaga padai* occurs with almost equal frequency in males and females. In this study, more number of Male cases was reported.

In this trial 40 cases were selected. Among 40 patients 13 (32.5%) patients between 41 and 50 years, 11 (27.5%) patients between 20 and 30 years, 10 (25%) patients between 31 and 40 years, 6 (15%) patients between 51 and 60 years. In this present study, considerable numbers of patients were reported (13 patients) between the age of 41-50 among study sample.

Among 40 cases recruited to this study, 1 (2.5%) patient had family history of psoriasis. Recent studies regarding psoriasis also emphasize on this concept that psoriasis has a genetic predisposition.

In this study only 1(2.5%) patients was vegetarian, and remaining 39(97.5%) patients were non vegetarian

In this present study, considerable numbers of patients were reported from *neithal* (62.5%)*, and marutham* (37.5%).

Highest number of patients 23(57.5%) were admitted during *Pinpani Kaalam* (*Maasi - Panguni*) and 14 patients (35%) were admitted during *Munpani kaalam (Maagazhi-Thai)*, remaining 3 patients were affected in *Kaar kaalam (Aavani –purattasi).*

Most of the patients 15 (37.5%) were affected in duration of 4 -6 years, 13(32.5%) were affected by the illness from 1 -3 years, 6 (15%) were affected from above 10 years. 5(12.5%) were affected from 10 -12 years, 1(2.5%) were affected from 7 -9 years.

Out of 40 patients (100%) patients had clinical features of Scaling, Auspitz sign positive, Candle grease sign positive, 31(77.5%) patient had Itching, 10 (25%) had fissure, 7(17.5%) had Nail changes, 6(15%) had Oozing, 5(12.5%) had Koebner's phenomenon, 3(7.5%) had Lichenification, 2 (5%) had palm and sole lesions.

Among 40 cases, all cases had itching and scaling which were markedly reduced after the treatment.

The outcome of this study was clinically observed by PASI Score, which showed encouraging results of good improvement in 21 patients (52.5%), moderate improvement in 13 patients (32.5%), and mild improvement in 6 (15%) of total 40 cases.

In this study, no adverse events were observed during the course of the treatment. At the time of discharge, all the patients were advised to attend Out-Patient Department of Sirappu Maruthuvam of NIS for 6 months further follow-up treatment.

SUMMARY

The disease *Kaalanjaga padai* was taken for the clinical study with *Parangipattai Chooranam* as internal medicine and *Sangamver Thylam* as external application. For the clinical study, 40 cases were selected based on the approved protocol.

The trial was approved by the Institutional Ethical Committee (IEC) (**Date of IEC Approval & its Number:NIS/IEC/2016/11/16/14.10.2016**). The trial was registered in Clinical Trial Registry of India **(CTRI REF/2018/02/017568)** Hence the study is safely executed on patients and there was no adverse drug reactions noted during the study period.

The detailed study on *Kaalanjaga padai* with reference to its aetiology, pathogenesis, investigations, clinical features, diagnosis and treatment with trial drugs was done.

The outcome results of my study was clinically observed by PASI SCORE that is 52.5% of cases had shown good improvement, 32.5% of cases had shown moderate improvement and remaining 15% of cases had shown mild improvement.

CONCLUSION

This clinical study validated the Siddha herbal formulation of the trial drug *"Parangipattai Chooranam*" is efficacy to human psoriatic population. It was found to be good resulting on *Kaalanjaga padi* patients in reducing clinical signs and symptoms like itching, scaling and erythema. The literature evidence for this drug is *Agasthiyar paripooranam* -400 which is well-known Shasthric preparation

In this study, no adverse reactions were reported. Hence, it is concluded that the trial drugs are clinically safe.

The cost of the trial medicines is low. These drugs are easily available and the dosage is also convenient.

The quantitative outcome of PASI score shows there is extremely significant reduction between at the commencement and end of the treatment i.e from 53.14±10.05 and 19.08±14.05 The qualitative outcome shows there is 52.5% of cases shown good improvement, 32.5% of cases shown moderate improvement and 15% shown mild improvement. The clinical trial conducted in selected patients was very much satisfactory and the results were encouraging.

From above results the trial drug of herbal formulation of "*Parangipattai chooranam*" (Internal) and "*Sangam ver Thylam"* (External) are well responded in the treatment of *Kaalanjaga padai.*

The Tamil Nadu Dr.M.G.R.Medical University

69, Anna Salai, Guindy, Chennai - 600 032.

This Certificate is awarded to Dr/Mr/Mrs.....LALITHA.S.....

For participating as ~~Resource Person~~ / Delegate in the Twenty First Workshop on

"RESEARCH METHODOLOGY & BIOSTATISTICS"

*For **AYUSH Post Graduates & Researchers***

Organized by the Department of Siddha

The Tamil Nadu Dr. M.G.R. Medical University From 25th to 29th April 2016.

Dr.N.KABILAN, MD(S),
PROF & HEAD
DEPT.OF SIDDHA

Prof.**Dr.P.ARUMUGAM,** M.D.,
REGISTRAR i/c

Prof. **Dr.S.GEETHALAKSHMI,** M.D., Ph.D.,
VICE CHANCELLOR

NATIONAL INSTITUTE OF SIDDHA, CHENNAI – 600047

BOTANICAL CERTIFICATE

Certified that the following plant drugs used in the Siddha formulations **"Parangipattai chooranam"** (Internal) and "**Sangam Ver thylam**" (External) taken up for Post Graduation Dissertation studies by **Dr.S.Lalitha** M.D.(S). II year. Department of Sirappu Maruthuvam, 2017, are identified through Visual inspection, Experience, Education & Training, Organoleptic characters, Morphology and Taxonomical methods as

Smilax china Linn. (Liliaceae), Root
Withania somnifera Dunal (Solanaceae), Root
Azima tetracantha Lam. (Salvadoraceae), Root
Calamus rotang Linn. (Arecaceae), Root
Cassia fistula Linn. (Caesalpiniaceae), Bark
Trianthema decandra Linn. (Ficoidaceae), Root
Plumbago zeylanica Linn. (Plumbaginaceae), Root
Glycyrrhiza glabra Linn. (Fabaceae), Root
Coriandrum sativum Linn. (Apiaceae), Fruit
Trachyspermum ammi (Linn.) Sprague (Apiaceae), Fruit
Aconitum heterophyllum Wall. (Ranunculaceae), Root
Piper cubeba Linn. f. (Piperaceae), Fruit
Trigonella foenum-graecum Linn. (Fabaceae), Seed
Alpinia officinarum Hance (Zingiberaceae), Rhizome
Anacyclus pyrethrum DC. (Asteraceae), Root
Piper longum Linn. (Piperaceae), Fruit
Myristica fragrans Houtt. (Myristicaceae), Nut
Myristica fragrans Houtt. (Myristicaceae), Aril
Syzygium aromaticum(Linn.) Merr. & L.M. Perry (Myrtaceae), dried flower bud
Nigella sativa Linn. (Ranunculaceae), Seed
Cuminum cyminum Linn. (Apiaceae), Fruit
Zingiber officinale Rosc. (Zingiberaceae), Dried Rhizome
Piper nigrum Linn. (Piperaceae), Fruit
Saccharum officinarum Linn. (Poaceae), Crystal sugar
Quercus infectoria Oliv. (Fagaceaae), Gall
Elettaria cardamomum Maton. (Zingiberaceae), Seed
Sesamum indicum Linn. (Pedaliaceae), Seed

Certificate No: NISMB3072017

Date: 25-07-17

MEDICINAL BOTANY CHENNAI 600 047 National Institute of Siddha

Authorized Signatory 25/7/17

Dr. D. ARAVIND, M.D.(s),M.Sc.,
Assistant Professor
Department of Medicinal Botany
National Institute of Siddha
Chennai - 600 047, INDIA

NATIONAL INSTITUTE OF SIDDHA- राष्ट्रीय सिद्ध संसथान
Ministry of AYUSH- आयुष मंत्रालय
GOVERNMENT OF INDIA-भारत सरकार
TAMBARAM SANATORIUM, CHENNAI -600 047 -ताम्बरम सनटोरियमचेन्नई -600 047
फ़ोन\Tele : 044-22411611 फैक्स\Fax : 22381314
ईमेल: nischennaisiddha@yahoo.co.in वेब :www.nischennai.org

F.No.NIS/6-20/IEC/15-16 Dt: 14.10.2016

CERTIFICATE

Address of Ethics Committee: National Institute of Siddha, Tambaram Sanatorium, Chennai-600047, Tamil Nadu, India	
Principal Investigator: Dr. S.Lalitha – I year, Dept.of Sirappu Maruthuvam	
Protocol Title:- An open Clinical Trial of "Parangipattai Chooranam" (Internal medicine) and "Sangamver Thylam" (External medicine) in the treatment of "Kaalanjaga Padai" (Psoriasis).	
Documents filed	1) Protocol, 2) Data Collection forms
Clinical trial Protocol (others – Specify)	**Yes-(M.D-Dissertation)**
Informed consent documents	**Yes**
Any other documents	-
Date of IEC approval & its number	**NIS/IEC/2016/11-16/ 14.10.2016**

We approve the trial to be conducted in its presented form.

The Institutional Ethics Committee expects to be informed about the progress of the study, any SAE occurring in the course of the study.

(Dr.V.Subramanian)
Chairman

(Prof.Dr.V.Banumathi)
Member Secretary

NATIONAL INSTITUTE OF SIDDHA CHENNAI 600 047

Clinical Trial Details (PDF Generation Date :- Mon, 09 Jul 2018 04:33:19 GMT)

CTRI Number	CTRI/2018/04/012989 [Registered on: 03/04/2018] - **Trial Registered Retrospectively**
Last Modified On	21/03/2018
Post Graduate Thesis	Yes
Type of Trial	Interventional
Type of Study	Drug Siddha
Study Design	Randomized, Parallel Group, Active Controlled Trial
Public Title of Study	Study of Parangipattai chooranam and sangamver thylam for Kaalanjagapadai
Scientific Title of Study	An open Clinical Trail of Parangipattai chooranam (internal medicune) and Sangamver thylam (external medicine) in the treatment of Kaalanjaga padai (Psoriasis)

Secondary IDs if Any

Secondary ID	Identifier
NIL	NIL

Details of Principal Investigator or overall Trial Coordinator (multi-center study)

Details of Principal Investigator	
Name	Ms Lalitha Sivasankaran
Designation	M.D. (Siddha) P.G. Scholar
Affiliation	
Address	Room No. 3, Out Patients Devision, Department of Sirappu Maruthuvam, National Institute of Siddha, Tambaram Sanatorium, Chennai-600047. Chennai TAMIL NADU 600047 India
Phone	9791783455
Fax	04422381314
Email	lalithasivasankaran4@gmail.com

Details Contact Person (Scientific Query)

Details Contact Person (Scientific Query)	
Name	Dr V Mahalakshmi
Designation	Lecturer
Affiliation	
Address	Room No. 3, Out Patients Devision, Department of Sirappu Maruthuvam, National Institute of Siddha, Tambaram Sanatorium, Chennai-600047. Chennai TAMIL NADU 600047 India
Phone	9444519975
Fax	04422381314
Email	rvmahalakshmi85@gmail.com

Details Contact Person (Public Query)

Details Contact Person (Public Query)	
Name	Dr Lalitha Sivasankaran
Designation	M.D. Siddha P. G. Scholar
Affiliation	
Address	Room No. 3, Out Patients Devision, Department of Sirappu Maruthuvam, National Institute of Siddha, Tambaram Sanatorium, Chennai-600047. Chennai TAMIL NADU

	600047 India
Phone	9791783455
Fax	04422381314
Email	lalithasivasankaran4@gmail.com

Source of Monetary or Material Support

Source of Monetary or Material Support
> Own expenses (with the PG Scholars stipend provide by the National Institute of Siddha)

Primary Sponsor

Primary Sponsor Details	
Name	National Institute of Siddha
Address	Tambaram Sanatorium, Chennai - 600047.
Type of Sponsor	Research institution and hospital

Details of Secondary Sponsor

Name	Address
NIL	NIL

Countries of Recruitment

List of Countries
India

Sites of Study

Name of Principal Investigator	Name of Site	Site Address	Phone/Fax/Email
DrSLalitha	OPD and IPD of the Hospital	Room No. 3 of Out Patients Department and Ward No 2 & 3 of In Patients Department, Ayothidoss Pandithar Hospital, National Institute of Siddha,Tambaram Sanatorium, Chennai -600047 Chennai TAMIL NADU	9791783455 04422381314 lalithasivasankaran4@gmail.com

Details of Ethics Committee

Name of Committee	Approval Status	Date of Approval	Is Independent Ethics Committee?
Institutional Ethical Committee of National Institute of Siddha	Approved	14/10/2016	No

Regulatory Clearance Status from DCGI

Status	Date
Not Applicable	No Date Specified

Health Condition / Problems Studied

Health Type	Condition
Patients	Who are suffering with Kalanjaga Padai (Psoriasis)

Intervention / Comparator Agent

Type	Name	Details
Intervention	Patients of Out patients Division (OPD) and In Patients Division (IPD) at Ayothidoss Pandithar Hospital, National Institute of Siddha	This is an open clinical control trial conducted by the patients who will come to OPD and IPD of Ayothidoss Pandithar Hospital, National Institute of Siddha with Kalanjagapadai (Psoriasis) under the inclusion criteria.
Comparator Agent	Parangipattai chooranam (internal medicune) and Sangamver thylam (external medicine)	Parangipattai chooranam (internal medicune) 2 grams with warm water, two times, after meals for 45 days And

			Sangamver thylam (external medicine) 60 Milliliter (quantity sufficient), two times (external application) for 45 days

Inclusion Criteria

Inclusion Criteria	
Age From	20.00 Year(s)
Age To	60.00 Year(s)
Gender	Both
Details	Erythema Thickness Scaling Itching : with or without itching Auspitz sign + Candle crease sign + Age : 20-60 years Sex : Both male and female Willing to attend OPD or admission in IPD for the trial Willing to give specimen of blood for the investigation Willingness for consent Willing to take photograph before and after treatment

Exclusion Criteria

Exclusion Criteria	
Details	EXCLUSION CRITERIA Diabetes Mellitus Pregnancy and lactation Psoriasis with evidence of any other skin disease Psoriatic arthropathy Cardiac disease Hansen's disease Evidences of secondary infection in the lesions Any other chronic illness

Method of Generating Random Sequence	Stratified randomization
Method of Concealment	An Open list of random numbers
Blinding/Masking	Open Label

Primary Outcome

Outcome	Timepoints
Primary outcome Clearance of lesions and Reduction of PASI Score from 3, 4 to 1,0	6 months

Secondary Outcome

Outcome	Timepoints
Moderate outcome Partial clearance of lesions and Reduction of PASI Score from 3, 4 to 2. Mild outcome Slight clearance of lesions and Reduction of PASI Score from 4 to 3 Nil outcome No Clearance of lesions or No reduction PASI Score	6 month

Target Sample Size	**Total Sample Size=**40 **Sample Size from India=**40
Phase of Trial	Phase 1/ Phase 2
Date of First Enrollment (India)	01/03/2018
Date of First	No Date Specified

Enrollment (Global)	
Estimated Duration of Trial	**Years=**0 **Months=**6 **Days=**0
Recruitment Status of Trial (Global)	Not Applicable
Recruitment Status of Trial (India)	Open to Recruitment
Publication Details	after the completion of study it will publish
Brief Summary	the Protocol was accepted by the Supervisor and the The TamilNadu Dr. MGR Medical University. IEC certificate was obtained. Literature review also completed. Pre Clinical and pilot study also Completed. Trial Medicine was prepared.

NATIONAL INSTITUTE OF SIDDHA
AYOTHIDOSS PANDITHAR HOSPITAL, CHENNAI – 600 047.

DEPARTMENT OF SIRAPPU MARUTHUVAM

AN OPEN CLINICAL TRIAL OF SIDDHA DRUGS *"PARANGIPATTAI CHOORANAM"* (INTERNAL) AND *"SANGAMVER THYLAM"* (EXTERNAL) IN THE TREATMENT OF *"KAALANJAGA PADAI"* (PSORIASIS)

Principal Investigator: Dr. S. LALITHA

FORM I - SCREENING & SELECTION PROFORMA

1. SERIAL NO: **2. OP /IP NO:**
3. NAME: **4. AGE/GENDER:**
5. OCCUPATION: **6. INCOME:**

INCLUSION CRITERIA

- Erythema YES\ NO
- Thickness YES\ NO
- Scaling YES\ NO
- Itching :with or without itching YES\ NO
- Auspitz sign + YES\ NO
- Candle crease sign + YES\ NO
- Age : 20-60 years YES\ NO
- Sex : Both male and female YES\ NO
- Willing to attend OPD or admission in IPD for the trial YES\ NO
- Willing to give specimen of blood for the investigation YES\ NO
- Willingness for consent YES\ NO
- Willing to take photograph before and after treatment. YES\ NO

EXCLUSION CRITERIA

- Diabetes Mellitus YES\ NO
- Pregnancy and lactation YES\ NO
- Psoriasis with evidence of any other skin disease YES\ NO
- Psoriatic arthropathy YES\ NO
- Cardiac disease YES\ NO
- Hansen's disease YES\ NO
- Evidences of secondary infection in the lesions YES\ NO
- Any other chronic illness YES\ NO

ADMITTED TO TRAIL

YES ☐ NO ☐
If Yes, OPD ☐ IPD ☐

Serial NO:

Date:
Station:
Signature of the Investigator:
Signature of the Lecturer: **Signature of the HOD**

NATIONAL INSTITUTE OF SIDDHA
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Principal Investigator: Dr.S.LALITHA.

FORM II-A – HISTORY TAKING PROFORMA

STUDY NO: **OP / IP NO:**
NAME: **AGE / GENDER:**
ADDRESS: **CONTACT NO :**
RELIGION : H / C / M / O.
OCCUPATION: **INCOME:**
MARITAL STATUS : 1. Married 2. Unmarried
DATE OF INTIAL ASSESSMENT: ☐
COMPLAINTS & DURATION:

PERSONAL HISTORY:

PERSONAL HABITS	YES	NO	IF YES SPECIFY DURATION	AMOUNT/Qty
Smoking				
Tobacco Chewing				
Alcohol				
Narcotic Drug Addiction				

HISTORY OF PREVIOUS ILLNESS AND TREATMENT TAKEN:

FAMILY HISTORY:
Whether this problem runs in family? 1. Yes 2. No
If yes, mention the relationship of affected person(s)
1._____
2._____

1. Vegetarian 2. Non-vegetarian

DIETARY STYLE:

FORM II B

GENERAL EXAMINATION:

1. Body weight [Kg]	:		
2. Height [cms]	:		
3. Body Temperature [F]	:		
4. Blood Pressure (mm/Hg)	:		
5. Pulse Rate /min.	:		
6. Heart Rate / min.	:		
7. Respiratory Rate /min.	:		
		Yes	**No**
8. Pallor	:	☐	☐
9. Jaundice	:	☐	☐
10. Clubbing	:	☐	☐
11. Cyanosis	:	☐	☐
12. Pedal Oedema	:	☐	☐
13. Lymphadenopathy	:	☐	☐
14. Jugular venous pulsation	:	☐	☐

SYSTEMIC EXAMINATION

Cardiovascular system	**:**
Respiratory system	**:**
Gastro-intestinal system	**:**
Central Nervous system	**:**
Urogenital system	**:**
Endocrine system	**:**

SIDDHA SYSTEM OF EXAMINATION

1. THEGI (BODY CONSTITUTION):

1. Vatha udal	☐
2. Pitha udal	☐
3. Kaba udal	☐
4. Thontha udal	☐

2. NILAM (LAND WHERE THE PATIENT LIVED MOST):

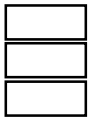
1. Kurinji (Hilly terrain)	☐
2. Mullai (Forest range)	☐
3. Marutham (Plains)	☐
4. Neithal (Coastal belt)	☐
5. Paalai (Aridregion)	☐

3. KAALAM:

1. Kaar kaalam	(Aavani-Purattasi)	☐
2. Koothir kaalam	(Ippasi-Kaarthigai)	☐
3. Munpani kaalam	(Maargazhi-Thai)	☐
4. Pinpani kaalam	(Maasi-Panguni)	☐
5. Ilavenil kaalam	(Chithirai-Vaigasi)	☐
6. Muthuvenil kaalam	(Aani-Aadi)	☐

4. GUNAM:

1. Sathuvam
2. Rasatham
3. Thamasam



5. PORIPULANGAL (SENSORY ORGANS):

	Before treatment	After treatment
Mei (Skin)	Normal / Affected	Normal / Affected
Vai (Tongue)	Normal / Affected	Normal / Affected
Kann (Eye)	Normal / Affected	Normal / Affected
Mooku (Nose)	Normal / Affected	Normal / Affected
Sevi (Ear)	Normal / Affected	Normal / Affected

6.KANMENDRIYAM (MOTOR ORGANS) :

	Before treatment	After treatment
Kai(Upper limb)	Normal /Affected	Normal /Affected
Kaal (Lower limb)	Normal /Affected	Normal /Affected
Vai (Oral cavity)	Normal /Affected	Normal /Affected
Eruvai (Anal region)	Normal /Affected	Normal /Affected
Karuvai (Uro-Genital region)	Normal /Affected	Normal /Affected

7.KOSANGAL (SHEATH):

	Before treatment	After treatment
Annamaya kosam	Normal /Affected	Normal /Affected
Pranamaya kosam	Normal /Affected	Normal /Affected
Manomaya kosam	Normal /Affected	Normal /Affected
Vignanamaya kosam	Normal /Affected	Normal /Affected
Ananthamaya kosam	Normal /Affected	Normal /Affected

8. SEVEN UDAL THAATHUKKAL (SEVEN SOMATIC COMPONENTS)

	Before treatment	After treatment
Saaram	Normal /Affected	Normal /Affected
Senneer	Normal /Affected	Normal /Affected
Oon	Normal /Affected	Normal /Affected
Kozhuppu	Normal /Affected	Normal /Affected
Enbu	Normal /Affected	Normal /Affected
Moolai	Normal /Affected	Normal /Affected
Sukkilam / Suronitham	Normal /Affected	Normal /Affected

9. UYIR THAATHUKKAL: [THREE HUMORS] (VALI/ AZHAL/ IYYAM)

A) VALI

	1th day	8th day	15th day	22nd day	29th day	36th day	43rd day	49th day
Praanan								
Abaanan								
Samaanan								
Udhaanan								
Viyaanan								
Naagan								
Koorman								
Kirukaran								
Devathathan								
Dhananjeyan								

B) AZHAL

	1th day	8th day	15th day	22nd day	29th day	36thday	43rd day	49th day
Analakam								
Ranjakam								
Saathakam								
Prasakam								
Aalosakam								

C) IYYAM

	1th day	8th day	15th day	22nd day	29th day	36th day	43rd day	49th day
Avalambagam								
Kilethagam								
Pothagam								
Tharpagam								
Santhigam								

10. ENVAGAI THERVU: [EIGHT TYPES OF EXAMINATION]

I. NAADI: [PULSE PERCEPTION]

NAADI	1th day	8th day	15th day	22nd day	29th day	36th day	43rd day	49th day

II. SPARISAM: [PALPATION]

Day	SPARISAM
1th day	
8th day	
15th day	
22nd day	
29th day	
36th day	
43rd day	
49th day	

III. NAA: [TONGUE]

NAA	1th day	8th day	15th day	22nd day	29th day	36th day	43rd day	49th day

IV. NIRAM: [COMPLEXION]

1. Vadham ☐
2. Pitham ☐
3. Kabam ☐

V. MOZHI: [VOICE]

1. High Pitched ☐
2. Low Pitched ☐
3. Medium Pitched ☐

VI.VIZHI: [EYES]

VIZHI	1th day	8th day	15th day	22nd day	29th day	36th day	43rd day	49th day

VII. MALAM: [BOWEL HABITS / STOOLS]

	Before treatment	After treatment
Niram		
Irugal		
Ilagal		
Others		

VIII. MOOTHIRAM [URINE EXAMINATION]
NEERKKURI:

Neerkkuri	Before treatment	After treatment
Niram		
Manam		
Edai		
Nurai		
Enjal		

NEIKKURI:

Neikkuri	Before treatment	After treatment
Aravana needathu/ Snake like pattern		
Azhipol paraviyathu Annular/Ringedpattern		
Muththothu ninrathu Pearlbeadepattern		
Other patterns		

12. CLINICAL EXAMINATION:

CLINICAL EXAMINATION OF SKIN

1.Site

2.Shape : Coin shape ☐ Irregular ☐ Dispersed ☐

3. Erythema: Present ☐ Absent ☐

4. Macule : ☐ ☐

5. Papule : ☐ ☐

6. Pustule : ☐ ☐

7. Itching: No ☐ Mild ☐ Moderate ☐ Severe ☐

8. Scaling: Mild ☐ Moderate ☐ Severe ☐

9.Fissures Present ☐ Absent ☐

10.Oozing: No ☐ Mild ☐ Moderate ☐ ☐
Severe

11.Lichenification: Present ☐ Absent ☐

12. Auspitz sign : Present ☐ Absent ☐

13. Koebner's phenomenon: Present ☐ Absent ☐

14. Candle grease sign: Present ☐ Absent ☐

EXAMINATION OF NAILS:

1. Pitting:	Present	☐	Absent	☐
2 Thickening:	Present	☐	Absent	☐
3. Collection of Hyperkeratotic debris:	Present	☐	Absent	☐
4. Separation of distal portion of nail:	Present	☐	Absent	☐

EXAMINATION OF JOINTS:

	YES	**NO**
Joint Involvement	☐	☐

PSORIASIS AREA AND SEVERITY INDEX (PASI)

A Psoriasis Area and Severity Index (PASI) is a quantitative rating scale for measuring the severity of psoriatic lesions based on area coverage and plaque appearance

Erythema / Thickness / Scaling-Rating score	**Area Scoring**
0 - None	0-Nil
1- Slight	1-1-9%
2- Moderate	2- 10%-29%
3-Severe	3-30%-49%
4-Very severe	4-50%-69%
	5-70%-89%
	6-90%-100%

PASI CALCULATION

Plaque Characteristic	Rating Score	Body region and weighting factor			
		Head	Upper Limbs	Trunk	Lower Limbs
Erythema	0 = None				
Thickness	1 = Slight				
	2 = Moderate				
Scaling	3 = Severe				
	4 = Very Severe				
Totals					
Weighting Factor		x 0.1	x 0.2	x 0.3	x 0.4
Surface area totals					
Degree of involvement as % for each body region affected (score each region between 0 and 6)	0 = None				
	1 = 1-9%				
	2 = 10-29%				
	3 = 30-49%				
	4 = 50-69%				
	5 = 70-89%				
	6 = 90-100%				
Surface area totals x % involvement totals Sum Scores above =					

- Add together each of Erythema/Thickness/Scaling scores for each of the body regions to give 4 separate sub totals A1, A2, A3 and A4
- Multiply each subtotal by amount of body surface area represented by that region i.e. A1 x 0.1 for head, A2 x 0.2 for upper limbs, A3 x 0.3 for trunk, A4 x 0.4 for lower limbs to give a value B1, B2, B3 and B4 for each body region respectively. A1 x 0.1=B1; A2 x 0.2=B2; A3 x0.3=B3; A4 x 0.4=B4
- For each body region multiply subtotal B1, B2, B3 and B4 by the score(0-6) of the % of body region involved to give 4 sub totals C1, C2, C3 and C4
- The patient's PASI score is the sum of C1+C2+C3+C4

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer: **Signature of the HOD**

NATIONAL INSTITUTE OF SIDDHA
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DEPARTMENT OF SIRAPPU MARUTHUVAM

AN OPEN CLINICAL TRIAL OF SIDDHA DRUGS *"PARANGIPATTAI CHOORANAM"* (INTERNAL) AND "*SANGAMVER THYLAM*" (EXTERNAL) IN THE TREATMENT OF *"KAALANJAGA PADAI"* (PSORIASIS)

Principal Investigator: Dr.S.LALITHA

1. SERIAL NO:

2. OP /IP NO:

3. NAME:
4. AGE/GENDER:

FORM-III - LABORATORY INVESTIGATIONS

BLOOD INVESTIGATIONS		NORMAL VALUES	BEFORE TMT (DATE)	AFTER TMT (DATE)
Hb (gm/dl)		M:12-15 W:11.5-12		
T.WBC (cells/cu.mm)		4000-11000		
DIFFERENTIAL COUNT (%)	Polymorphs	40-75		
	Lymphocytes	20-40		
	Monocytes	2-10		
	Eosinophils	1-6		
	Basophils	0-1		
T.RBC (million cells / cu.mm)		M:4.0-5.5 W:3.5-4.5		
ESR (mm/hour)	½ hr.	M:6-12 W:7-18		
	1 hr.			
Blood glucose (mg/dl)	Fasting	70-110		
	PP	80-140		
	Random	80-120		
RFT (mg/dl)	Blood urea	16-50		
	Serum Creatinine	0.6-1.2		

LFT (mg/dl)	Total bilirubin	0.2-1.2		
	Direct bilirubin	0.1-1.2		
	Indirect bilirubin	0.2-0.7		
	SGOT	0-40		
	SGPT	0-35		
	Alkaline phosphatise	80-290		

URINE INVESTIGATION	BEFORE TMT(DATE)	AFTER TMT (DATE)
Albumin		
Fasting sugar		
PP sugar		
Deposits		

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer: **Signature of the HOD**

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AYOTHIDOSS PANDITHAR HOSPITAL, CHENNAI – 600 047.

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Name of Principal Investigator: Dr.S.LALITHA

FORM –IV- DRUG COMPLIANCE FORM

SERIAL NO:

NAME:

DRUG NAME:

On 1st day-Date: Drugs issued: (Gms) Drugs returned: (Gms)

On 8th day-Date: Drugs issued: (Gms) Drugs returned: (Gms)

On 15th day-Date: Drugs issued: (Gms) Drugs returned: (Gms)

On 22th day-Date: Drugs issued: (Gms) Drugs returned: (Gms)

On 29th day-Date: Drugs issued: (Gms) Drugs returned: (Gms)

On 36th day-Date: Drugs issued: (Gms) Drugs returned: (Gms)

On 42th day-Date: Drugs issued: (Gms) Drugs returned: (Gms)

On 48th day-Date: Drugs issued: (Gms) Drugs returned: (Gms)

Day	Date	Morning	Evening	Day	Date	Morning	Evening
Day 1				Day25			
Day2				Day26			
Day3				Day27			
Day4				Day28			
Day5				Day29			
Day6				Day30			
Day7				Day31			
Day8				Day32			
Day9				Day33			
Day10				Day34			
Day11				Day35			
Day12				Day36			
Day13				Day37			
Day14				Day38			
Day15				Day39			
Day16				Day40			
Day17				Day41			

Day18				Day42			
Day19				Day43			
Day20				Day44			
Day21				Day45			
Day22				Day46			
Day23				Day47			
Day24				Day48			

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer: **Signature of the HOD**

NATIONAL INSTITUTE OF SIDDHA
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DEPARTMENT OF SIRAPPU MARUTHUVAM

. **AN OPEN CLINICAL TRIAL OF SIDDHA DRUGS *"PARANGIPATTAI CHOORANAM"* (INTERNAL) AND *"SANGAMVER THYLAM"* (EXTERNAL) IN THE TREATMENT OF *"KAALANJAGA PADAI"* (PSORIASIS)**

FORM-V– INFORMATION SHEET

Name of Principal Investigator : Dr.S.LALITHA
Name of the institute : National Institute of Siddha,
Tambaram Sanatorium,
Chennai-47.

INFORMATION SHEET FOR PATIENTS PARTICIPATING IN THE OPEN CLINICAL TRIAL:

I, Dr.S.Lalitha Studying as M.D(Siddha) at National Institute of Siddha, Tambaram Sanatorium is doing a trial on the study Kaalanjagapadai (Psoriasis). Psoriasis is a most common persistent skin disease, occurring throughout the world. In this regard, I am in a need to ask you few questions. I will maintain confidentiality of your comments and data obtained. There will be no risk of disclosing your identity and no physical, psychological or professional risk is involved by taking part in this study. Taking part in this study is voluntary. No compensation will be paid to you for taking part in this study.

You can choose not to take part. You can choose not to answer a specific question. There is no specific benefit for you if you take part in the study. However, taking part in the study may be of benefit to the community, as it may help us to understand the problem of defaulters and potential solutions.

If you agree to be a participant in this study, you will be included in the study primarily by signing the consent form and then you will be given the internal medicine parangipattai chooranam (Internal medicine-2gm, Twice a Day with Palm Hot water for 48 days) and Sangam Ver Thylam (External medicine), if you wish to stay in the In Patient ward Treatment will be provided to you assuring that you will not be definitely hurt in any course of treatment.

The information I am collecting in this study will remain between you and the principal investigator (myself).

If you wish to find out more about this study before taking part, you can ask me all the questions you want or contact Dr.S.Lalitha, PG Scholar cum principal investigator of this study, attached to National Institute of Siddha, Chennai-47. You can also contact the Member-secretary of Ethics committee, National Institute Siddha,Chennai 600047, Tel no : 91-44-22380789, for rights and participation in the study.

FORM-V-தகவல் படிவம்

காளாஞ்சகப்படை (தோல் நோய்) நோய்க்கான பரங்கிப்பட்டை சூரணம் (உள் மருந்து) மற்றும் சங்கம்வேர் தைலம்(வெளி மருந்து) சித்த மருந்துகளின் பரிகரிப்புத் திறனைக் கண்டறியும் மருத்துவ ஆய்விற்கான தகவல் படிவம்.

முதன்மை ஆராய்ச்சியாளர் பெயர் : Dr. சி.லலிதா

நிறுவனத்தின் பெயர் : தேசிய சித்த மருத்துவ நிறுவனம்,

தாம்பரம் சானட்டோரியம், சென்னை- 47.

தேசிய சித்த மருத்துவ நிறுவனத்தில் பட்ட மேற்படிப்பு பயின்று வரும் நான் காளாஞ்சகப்படை என்னும் தோலைப் பாதிக்கும் நோயில் மருத்துவ ஆராய்ச்சியில் ஈடுபட்டுள்ளேன்.

சித்த மருத்துவத்தில் காளாஞ்சகப்படை என்னும் நோயானது தோலைப் பாதிக்கும் ஒரு நோயாகும். இந்த நோயில் தோலில் சிவப்பு நிற திட்டுகளை ஏற்படுத்தி அதில் செதில் போல் உதிர செய்யும் சில சமயம் அரிப்புடனோ அல்லது அரிப்பின்றியோ காணப்படும். இது மற்றவர்களுக்குப் பரவ கூடிய நோய் அல்ல. இந்த ஆராய்ச்சி சம்மந்தமாக சில கேள்விகளை கேட்கவும், தோலை பரிசோதிக்கவும், தேவையான ஆய்வக பரிசோதனைக்கும் தங்களை உட்படுத்தவும் உள்ளேன்.

இந்த ஆராய்ச்சிக்கு தாங்கள் விருப்பத்தின் பேரில் உட்படும் பட்சத்தில் உள்மருந்தாக **பரங்கிப்பட்டை சூரணம்** 2கி அளவு அனுபானத்தில்வெந்நீர் 2 வேளை (காலை மாலை) உணவுக்குப் பின் 48 நாட்களுக்கு உட்கொள்ள வேண்டும். வெளி மருந்தாக **சங்கம்வேர் தைலம்** 48 நாட்களுக்கு நோயுள்ள இடங்களில் வெளியே தடவ வேண்டும்.வெளி நோயாளர்கள் 7 நாட்களுக்கு ஒருமுறை மருத்துவமனைக்கு வரவேண்டும்.

இது சம்பந்தமான தங்களது அனைத்து விவரங்களும் ரகசியமாக வைக்கப்படும் என உறுதிஅளிக்கிறேன். இதில் பயணப்படி முதலிய எந்த உதவி தொகையும் வழங்கப்பட மாட்டாது.இந்த ஆராய்ச்சியின் போது உடலுக்கு வேறு பாதிப்பு ஏற்படும் பட்சத்தில் தேசிய சித்த மருத்துவமனையில் தக்க மாற்று சிகிச்சை அளிக்கப்படும். இந்த ஆராய்ச்சியில் தங்களை உட்படுத்திய பிறகு உங்களுக்கு விருப்பமில்லையெனில் எப்போது வேண்டுமானாலும் விலகி கொள்ள முழு உரிமை உள்ளது

இந்த ஆராய்ச்சி சம்பந்தமாக மற்ற விபரங்களுக்கும் நோயின் தன்மை பற்றியும் முதன்மை
ஆராய்ச்சியாளரான Dr. சி.லலிதா பட்ட மேற் படிப்பாளர் சிறப்பு மருத்துவ பிரிவு அணுகவும்.
கைப்பேசி எண்:9841729895
மேலும் இந்த ஆராய்ச்சிக்கு IEC சான்று பெறப்பட்டுள்ளது.

இந்த மருந்து காளாசகப்படை நோய்க்காக சித்த மருத்துவத்தில் கூறப்பட்டுள்ளது. ஏற்கனவே உபயோகத்தில் உள்ள இது போன்ற மருந்து இதுவரை நோயாளிகளிடம் எந்தவித பக்க விளைவுகளையும் ஏற்படுத்தவில்லை. மேலும் உணவு முறையில் கத்தரி, பாகல், கரப்பான் பண்டங்கள், உப்பு, புளிப்பு முதலியவைகளை தவிர்த்து பத்தியம் காக்குமாறு அறிவுறுத்தப்படுகிறது

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Name of Principal Investigator: Dr.S.Lalitha

FORM-VI – CONSENT FORM

"I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have asked have been answered to my satisfaction.

I consent voluntarily to participate as a participant in this study and understand that I have the right to withdraw from the study at any time without in any way it affecting my further medical care".

"I have received a copy of the information sheet/consent form".

Date:

Signature of the participant

In case of illiterate participant

"I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had the opportunity to ask questions. I confirm individual has given consent freely."

Date:

Signature of a witness
(Selected by the participant bearing no connection with the survey team)

Left thumb Impression of the Participant

FORM VI ஒப்புதல் படிவம்

ஆய்வாளரால் சான்றளிக்கப்பட்டது

நான் காளாஞ்சகப்படை என்னும் நோயின் ஆய்வைக் குறித்த அனைத்து விபரங்களையும் நோயாளிக்குப் புரியும் வகையில் எடுத்துரைத்தேன் என உறுதியளிக்கிறேன்.

தேதி: **கையொப்பம்:**

இடம்: **பெயர்:**

நோயாளியின் ஒப்புதல்

என்னிடம் இந்த மருத்துவ ஆய்வின் காரணத்தையும், மருந்தின் தன்மை மற்றும் மருத்துவ வழிமுறை பற்றியும், தொடர்ந்து எனது உடல் இயக்கத்தைக் கண்காணிக்கவும், அதனைப் பாதுகாக்கவும் பயன்படும் மருத்துவ ஆய்வுக்கூட பரிசோதனைகள் பற்றி திருப்தி அளிக்கும் வகையில் ஆய்வு மருத்துவரால் விளக்கிக் கூறப்பட்டது.

நான் இந்த மருத்துவ ஆய்வின் போது, எப்பொழுது வேண்டுமானாலும் இந்த ஆய்விலிருந்து என்னை விடுவித்து கொள்ளும் உரிமையைத் தெரிந்திருக்கின்றேன்.

நான் என்னுடைய சுதந்திரமாகத் தேர்வு செய்யும் உரிமையைக் கொண்டு காளாஞ்சகப்படை நோய்க்கான (உள் மருந்து)பரங்கிப்பட்டை சூரணம் (வெளி மருந்து) சங்கம்வேர் தைலம் மருந்தின் பரிகரிப்புத் திறனைக் கண்டறியும் மருத்துவ ஆய்விற்கு என்னை உட்படுத்த ஒப்புதல் அளிக்கிறேன்.

தேதி: **கையொப்பம்:**

இடம்: **பெயர்:**

சாட்சிக்காரர்கையொப்பம்:

பெயர்:

உறவுமுறை:

விரிவுரையாளார் கையொப்பம்: **துறைத்தலைவர் கையொப்பம்:**

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.

Name of Principal Investigator: Dr.S.LALITHA

FORM VII - WITHDRAWAL FORM

1. SERIAL NO OF THE CASE:

2. OP / IP NO:

3. NAME:

4. AGE:

5. GENDER:

6. DATE OF TRIAL COMMENCEMENT:

7. DATE OF WITHDRAWAL FROM TRIAL:

8. REASONS FOR WITHDRAWAL:

Long absence at reporting:	Yes/ No
Irregular treatment:	Yes/ No
Shift of locality:	Yes/No
Increase in severity of symptoms:	Yes/No
Development of severe adverse drug reactions:	Yes/No
Development of adverse event:	Yes/No

(If YES, give the details of adverse reaction in Form VII -B – Adverse Reaction Form / Pharmaco Vigilance Form)

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer: **Signature of the HOD**

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Name of Principal Investigator: Dr.S.LALITHA

FORM VII - A – ADVERSE REACTION FORM / PHARMACO VIGILANCE FORM

SERIAL NO:

OP/IP NO:

NAME: **AGE:** **GENDER:**

DATE OF TRIAL COMMENCEMENT:

DATE OF THE ADVERSE REACTION OCCUR:

DESCRIPTION OF ADVERSE REACTION:

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer: **Signature of the HOD**

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Name of Principal Investigator:Dr.S.LALITHA

FORM VIII – DIETARY ADVICE FORM

சேர்க்க கூடிய உணவுகள்	தவிர்க்க வேண்டியவைகள்
முருங்கைப்பிஞ்சு அவரைப்பிஞ்சு காரட் பீட்ரூட் கரிசாலை பொன்னாங்கண்ணி மணத்தக்காளி முருங்கைக்கீரை பசலைக்கீரை சிறுகீரை கறிவேப்பிலை கொத்தமல்லி மாதுளை ஆப்பிள் பேரீச்சை திராட்சை கொய்யா நாவல் சப்போட்டா உலர் திராட்சை வேகவைத்த காய்கறிகள்	கோழிக்கறி மீன் நண்டு கருவாடு முட்டை பால் பால் பொருள்கள் புளிப்புப் பொருள்கள் வேர்க்கடலை எள்ளு அன்னாசி நல்லெண்ணெய் எலுமிச்சை தக்காளி புளிப்பு தயிர் மோர் ஊறுகாய் பெண்போகம் வெற்றிலை,பாக்கு புகையிலை மது அருந்துதல்

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